SECNAVINST 5000.2C
DASN(RD&A)ACQ
November 19, 2004

SECNAV INSTRUCTION 5000.2C

From: Secretary of the Navy

Subj: IMPLEMENTATION AND OPERATION OF THE DEFENSE ACQUISITION SYSTEM AND THE JOINT CAPABILITIES INTEGRATION AND DEVELOPMENT SYSTEM

Ref: (a) DoD Directive 5000.1, "The Defense Acquisition System," 12 May 03 (NOTAL)
(b) DoD Instruction 5000.2, "Operation of the Defense Acquisition System," 12 May 03 (NOTAL)
(c) Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01D, "Joint Capabilities Integration and Development System," 12 Mar 04 (NOTAL)
(d) Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3170.01A, "Operation of the Joint Capabilities Integration and Development System," 12 Mar 04 (NOTAL)
(e) Marine Corps Order (MCO) 3900.15A, "Marine Corps Expeditionary Force Development System," 26 Nov 02 (NOTAL)
(f) SECNAVINST 5400.15A, "DON Research, Development and Acquisition, and Associated Life Cycle Management Responsibilities," 26 May 95 (NOTAL)
(g) SECNAVINST 5200.35D, "Department of the Navy Management Control Program," 10 Dec 97 (NOTAL)
(h) SECNAVINST 5710.25A, "International Agreements," 2 Feb 95 (NOTAL)
(i) DEPSECDEF memorandum, "Global Information Grid Enterprises Services (GIG ES): Core Enterprise Services (CES) Implementation," 10 Nov 03 (NOTAL)

Encl: (1) Chapter 1 - Table of Contents
(2) Chapter 2 - Capabilities Development and Acquisition Management Processes
(3) Chapter 3 - Statutory, Regulatory, and Contract Reporting Information and Milestone Requirements
(4) Chapter 4 - Information Technology Considerations
(5) Chapter 5 - Integrated Test and Evaluation
(6) Chapter 6 - Resource Estimation
(7) Chapter 7 - Systems Engineering and Human Systems Integration
(8) Chapter 8 - Acquisition of Services
(9) Chapter 9 - Program Management
(10) Chapter 10 - SECNAVINST, OPNAVINST, and Marine Corps Orders Cancellations

1. Purpose. To issue mandatory procedures for Department of the Navy (DON) implementation of references (a), (b), (c), and (d) for major and non-major defense acquisition programs and major and non-major information technology (IT) acquisition programs.

2. Cancellation. SECNAVINST 5000.2B.

3. Background. A discretionary Defense Acquisition Guidebook provides best practices, lessons learned, and expectations to support development of the information required by reference (b). The Defense Acquisition Guidebook can be found at http://akss.dau.mil/jsp/default.jsp. Additionally, a DON Acquisition and Capabilities Guidebook will be issued as a companion to this instruction and will be available at the above Defense Acquisition University (DAU) website. This guidebook, discretionary in nature, will contain citations from this instruction and other mandatory references only for clarification. The DON Acquisition and Capabilities Guidebook will not introduce new or additional mandatory guidance. Reference (e) contains the Marine Corps requirements generation procedures that will be updated to include joint capabilities integration and development.

4. Discussion. Enclosure (1) is the Table of Contents. Enclosures (2) through (9) provide procedures to implement references (a), (b), (c), and (d). Enclosure (10) lists documents canceled by this instruction.

5. Applicability and Precedence

a. The provisions of this instruction apply to all DON organizations, to all acquisition category (ACAT) acquisition programs including Naval Intelligence and Naval Cryptologic ACAT programs, abbreviated acquisition programs, non-acquisition programs, and Rapid Deployment Capability programs. The designation ACAT I, when used in this instruction, signifies both ACAT ID and IC programs. Similarly, the designation ACAT IA, when used in this instruction, signifies both ACAT IAM and IAC programs.

b. References (a), (b), (c), (d), and this instruction take precedence over any issuances conflicting with them, except for policy, direction, or guidance embodied in current statute, regulation, the Defense Federal Acquisition Regulation Supplement, and the Navy-Marine Corps Acquisition Regulation Supplement.

6. Overall Acquisition Process. Enclosures (2) through (9) of this instruction follow the enclosure numbering of, and implement, reference (b) and applies to all DON acquisition and non-acquisition programs as defined by each enclosure. The titles and general content of the enclosures of this instruction

follow the titles and general content of the corresponding enclosures in reference (b).

7. Responsibilities

a. The Assistant Secretary of the Navy (Research, Development and Acquisition)(ASN(RD&A)) is the DON Component Acquisition Executive (CAE) responsible for DON acquisition per reference (f).

b. The ASN(RD&A) Chief Engineer (CHENG) provides senior leadership and focus within the acquisition structure on integration and interoperability across all Navy and Marine Corps Program Executive Officers (PEOs), Systems Command (SYSCOM) Commanders, Direct Reporting Program Managers (DRPMs), and Program Managers (PMs). The ASN(RD&A) CHENG will:

(1) Ensure that the functional design of combat and C4I systems is compatible with the overall integrated architecture as described in reference (d),

(2) Ensure that component systems are engineered and implemented to operate coherently with other systems as part of a larger force including a system of systems (SoS) or family of systems (FoS),

(3) When directed by ASN(RD&A), conduct integration and interoperability assessments of SoS and FoS to determine adherence to interoperability requirements, architecture standards, joint technical architecture (JTA) technical standards, and interface specifications. Advise ASN(RD&A) and SoS/FoS management authorities, as appropriate, of the results of these assessments.

(4) Assess proposed architectural and JTA technical standards for their impact on acquisition programs. Advise ASN(RD&A) on the results of these assessments, and

(5) Provide architectural and JTA technical standards guidance to PMs via acquisition programs' established integrated product team/acquisition coordination team (IPT/ACT) processes.

c. The DON Chief Information Officer (CIO) is responsible for developing and issuing IT management policies and ensuring the creation, maintenance, and implementation of the DON Enterprise Architecture and Standards in coordination with ASN(RD&A) CHENG, Chief of Naval Operations (CNO)/Commandant of the Marine Corps (CMC), and SYSCOMs. The DON CIO is also responsible for confirming (or certifying for major automated information systems (MAIS)) that mission critical (MC) or mission essential (ME) IT systems comply with the Clinger-Cohen Act (CCA) and are registered in the DON database. Additionally, per the CCA, the DON CIO recommends to the Secretary of the Navy whether to continue, modify, or terminate IT programs. The DON CIO will:

(1) Review, direct development and use of a capability-related, outcome-based mission and business area integrated architectures to ensure interoperability of IT, including National Security Systems (NSS), throughout DON.

(2) Implement the provisions of Division E of the Clinger-Cohen Act of 1996, 40 United States Code (USC) Chapter 25, as amended, within DON.

(3) Provide policy on interoperability and supportability of IT, including NSS, and 10 USC Sections 2223 and 2224, as amended.

(4) Review Information Support Plans from the perspective of interoperability.

(5) Review and approve information assurance strategies where required by this instruction.

(6) Develop and issue information assurance policies to ensure that information assurance and information systems security engineering are employed in the acquisition of all DON automated information system (AIS) applications.

d. Chief of Naval Operations (CNO)/Commandant of the Marine Corps (CMC) are responsible for the DON's joint capabilities integration and development process, mission area/business area architecture developments, operational test and evaluation (OT&E), readiness, planning and programming to satisfy operational capability needs, and providing acquisition logistics assistance to ASN(RD&A)(Deputy ASN (Logistics)) as well as all of the specific additional responsibilities listed in reference (f). CNO and CMC IT functional area managers, responsible for initially identifying IT requirements and developing mission/business area architectures, are listed at the DON CIO website (www.doncio.navy.mil). CNO program sponsors are responsible for identifying naval warfare, functional area, and IT program capability needs/requirements. The legacy term "requirements" as used in this instruction may be interpreted to mean "capability needs" as defined in reference (c). CNO resource sponsors are responsible for specific appropriation categories and may also have dual responsibility as program sponsors. Note: Wherever "CNO/CMC" is used throughout this instruction, it should be interpreted to include, "or designee," unless otherwise stated.

e. The Commander, Operational Test and Evaluation Force (COMOPTEVFOR) and Director, Marine Corps Operational Test and Evaluation Activity (Director, MCOTEA) are responsible for independent OT&E of Navy and the Marine Corps acquisition programs that require OT&E, respectively.

f. PEOs, SYSCOM Commanders, and DRPMs are accountable for the specific responsibilities listed in reference (f), including administration of assigned acquisition programs, and reporting directly to the CAE for such programs. PEOs, SYSCOM Commanders, DRPMs, and PMs have authority, responsibility, and accountability for life-cycle management of all acquisition programs within their cognizance. PEOs, SYSCOM Commanders, and DRPMs shall implement appropriate management controls as required by reference (a) and per reference (g) to ensure the policies contained in this instruction are implemented to the maximum extent practical. SYSCOM Commanders shall also provide support, as applicable, to PEOs, DRPMs, and PMs.

g. The Deputy Assistant Secretary of the Navy, International Programs (DASN(IP)), who is also the Director, Navy International Programs Office (Navy IPO), is responsible for formulating, developing, and managing international policy and oversight of the DON's international programs. Areas of responsibility, per references (f) and (h), include armaments cooperation programs, cooperative research, development, and acquisition agreements, information and personnel exchange agreements, foreign comparative test projects, security assistance programs, export controls, and technology transfer and disclosure policy.

h. The Naval Cost Analysis Division (NCAD), Office of Budget, Assistant Secretary of the Navy (Financial Management and Comptroller) (ASN(FM&C)), per 10 USC 5014 and reference (b), is responsible for:

(1) Preparing life-cycle, independent cost estimates (ICEs) for major defense acquisition programs (MDAPs) designated ACAT IC and component cost analyses of major automated information system (MAIS) programs designated ACAT IA to support Milestones B and C decisions.

(2) Assessing the accuracy of economic and business-case analyses for ACAT IA programs.

(3) Serving as the DON's representative to the Office of the Secretary of Defense Cost Analysis Improvement Group (CAIG).

i. CNO (N1) and CMC (Deputy Commandant, Manpower and Reserve Affairs (DC,M&RA)) are responsible for supporting the PEOs, SYSCOM Commanders, and DRPMs by providing assistance for exploring options that maximize use of technology to reduce manpower and personnel requirements and life-cycle cost throughout a program's life-cycle. CNO (N1) and CMC (DC,M&RA) are the primary advisors for manpower and personnel for acquisition coordination teams. CNO (N1) and CMC (DC,M&RA) shall assist the Warfare Directors, PEOs, SYSCOM Commanders, and DRPMs in identifying previous manpower shortfalls, determining legacy manpower, assessing the cumulative affects of manpower requirements across a family-of-systems, and projecting manpower availability. The Naval Manpower Analysis Center (NAVMAC), CNO

(N121), is responsible for assisting Navy PMs and IPTs with manpower requirements estimates, independent manpower impact statements, and contractor developed manpower estimates.

j. The Director of Naval Education and Training (CNO (N00T)) is the resource sponsor for individual training and education, and is one of the Navy approval authorities for capabilities documents containing education, training, and related human performance requirements. CNO (N00T) serves as Human Performance Systems Model (HPSM) advocate in the acquisition process and participates in the identification of education and training shortfalls and investigates innovative approaches and solutions to satisfy education and training requirements.

k. The Director of Naval Intelligence (CNO (N2)) is responsible for threat intelligence and for validating threat tactics supporting capabilities development, program development, and test and evaluation of Navy acquisition programs. The Defense Intelligence Agency (DIA) will validate CNO (N2) threat assessments for ACAT ID programs.

l. The Chief of Naval Research (CNR) is responsible for science and technology (S&T) planning and implementation supporting the requirements set forth in this instruction.

Detailed responsibilities for the foregoing organizations, including those for IT, are found in enclosures (2) through (9).

8. Action. DON activities shall:

a. Ensure that the policies, procedures, documentation, and reports as required by references (a), (b), (c), (d), (i), and this instruction and its enclosures are followed.

b. Review existing guidance and instructions and cancel or update to conform with references (a), (b), (c), (d), (i), and this instruction.

(1) Unless prescribed by statute or specifically authorized here, the acquisition policies and procedures of this instruction will not be supplemented without the prior approval of ASN(RD&A).

(2) Implementing directives, instructions, regulations, memorandums, and related issuances shall be kept to a minimum.

(3) CNO and CMC may issue memorandum revisions to the joint capabilities integration and development procedures of this instruction.

c. Distribute this instruction to appropriate command personnel.

9. Reports and Forms

a. Reports. The following reports listed in enclosure (3) have been assigned report symbols and approved in accordance with SECNAVINST 5214.2B:

(1) Selected Acquisition Report (SAR), DD-AT&L (Q&A) 823 (5000)

(2) Unit Cost Report (UCR), DD-AT&L (AR) 1591 (5000)

(3) Registration of Mission-Critical & Mission-Essential Information Systems (RMC&MEIS), DD-C3I (AR) 2096 (5000)

(4) Defense Acquisition Executive Summary (DAES), DD-AT&L (Q) 1429 (5000)

b. Forms. The Application for Department of Defense Common Access Card--DEERS, DD 350 is available on the DOD forms website at http://web1.whs.osd.mil/icdhome/forms.htm. The Report Documentation Page, SF-298 is available on the General Services Administration (GSA) website at http://www.gsa.gov/Portal/gsa/ep/formslibrary.do?formType=SF.

/signed/
John J. Young, Jr.
Assistant Secretary of the Navy
(Research, Development and
Acquisition)

Distribution:
Electronic only, via Navy Directives Website
http://neds.daps.dla.mil/

SNDL	A1A	(SECNAV)
	A1B	(UNSECNAV)
	A1B1	(UNSECNAV AA)
	A1B2	(ASSTDEPUNSECNAV SS)
	A1F	(ASSTSECNAV FMC)
	A1G	(ASSTSECNAV IE)
	A1H	(ASSTSECNAV MRA)
	A1J	(ASSTSECNAV RDA)
	A1J1	(PEOJAST)
	A1J1A	(PEOTACAIR)
	A1J1B	(PEOASWASM)
	A1J1C	(PEOSTRKWPNSUAVN)
	A1J1F	(PEO C4I and SPACE)
	A1J1I	(DRPM AAA)(Washington, DC)
	A1J1L	(PEO IWS)
	A1J1M	(PEO LMW)
	A1J1N	(PEOSUB)
	A1J1O	(DIRSSP)
	A1J1P	(PEO SHIPS)
	A1J1Q	(PEO CARRIERS)
	A1J1R	(PEO IT)
	A1J1R1	(PEO IT DET SAN DIEGO CA)
	A1K	(OGC)
	A2A	(Department of the Navy Staff Offices (DDRTF, NAVCRIMEINVSERV, DIR SADBU, OCAG, DONOMIT, AUDGEN, CHINFO, CNR, DONCIO, DONPIC, NAVY JAG, NAVINSGEN, OLA, OPA))
	A3	(Chief of Naval Operations (N1, N2, N3/N5, N4 N6/N7, N70, N74, N75, N76, N77, N78, N8, N80, N81, N82, N09, N09N, N00N, N00T, N091, N093, N095, N096, NO97))
	A5	(CHNAVPERS)
	A6	(Commandant of the Marine Corps (CL; OLA; PA; I; DC,A; DC,CD; DC,I&L; DC,M&RA; DC,PP&O; DC,P&R; Director,C4/Marine Corps CIO)
	B2	(Defense Agencies (DSMC, FORT BELVOIR, VA, only))
	21A	(Combatant Commanders)
	22A	(Fleet Commanders)
	23C	(COMNAVRESFOR)
	24J1	(CG MARFORLANT)
	24J2	(CG MARFORPAC)
	24J4	(CG MARFORRES New Orleans LA)
	26F	(Operational Test and Evaluation Force)
	41A	(COMSC)
	46Y	(MCTSSA)
	50D	(COMNAVSPECWARCOM, COMNETWARCOM)
	C20C	(NRL DET)(Stennis Space Center, only)

Distribution: (continued)

SNDL	C80	(Shore Based Detachments, NAVAIRSYSCOM)
	C81	(Shore Based Detachments, SPAWARSYSCOM)
	C82	(Shore Based Detachments, FACENGCOM)
	C83	(Shore Based Detachments, SUPSYSCOM)
	C84	(Shore Based Detachments, SEASYSCOM)
	C85	(Shore Based Detachments, NAVDIS)
	C86	(Shore Based Detachments, SPECWARCOM)
	D1D	(OFFCPM)
	D2A	(NAVCOSTCEN)
	E3A	(NRL)
	E3C	(OFFSPECTECH)(Ft Washington MD)
	E7A	(NAVAUDSVCHQ)
	FA10	(SUBBASE)(Kings Bay, only)
	FA9	(COMNAVMETOCCOM)
	FE1	(COMNAVSECGRU)
	FF5	(COMNAVSAFECEN)
	FF6	(NAVOBSY)
	FF42	(NAVPGSCOL)
	FG1	(COMNAVNETOPSCOM)
	FH	(BUMED Shore Activities under the Command of CHBUMED as delegated by the CNO)
	FH1	(BUMED)
	FJA10	(NAVMAC)
	FKA1A	(COMNAVAIRSYSCOM (AIR-1.1B))
	FKA1B	(COMSPAWARSYSCOM (SPAWAR-00A-A))
	FKA1C	(COMNAVFACENGCOM)
	FKA1F	(COMNAVSUPSYSCOM (SUP-50, SUP-03, SUP-04))
	FKA1G	(COMNAVSEASYSCOM)
	FKA8F1	(NAVORDTESTU)
	FKA8F2	(NAVPMOSSP)
	FKA8F4	(SWFPAC)
	FKA8F6	(MCSFCO)
	FKM	(Shore Activities under the Command of COMNAVSUPSYSCOM as delegated by the CNO (less FKM12, FKM14))
	FKM6	(NOLSC (SUP-40))
	FKM14	(NAVICP (05))
	FKP	(Shore Activities under the Command of COMNAVSEASYSCOM as delegated by the CNO (less FKP1, FKP4, FKP7, FKP8, FKP16, FKP18))
	FKP1	(Weapons Activities)
	FKP1E	(COMNAVUNSEAWARCEN) (Newport, only))
	FKP4	(COMNAVSURFWARCEN)(Washington DC)(less FKP4A, FKP4E))
	FKP4A	(NAVSURFWARCEN COASTSYSTA (NCSC-7112))
	FKP4E	(NAVSURFWARCENDIV (Dahlgren, only)(NSWC-D1))
	FKP7	(NAVSHIPYD)
	FKP8	(SUPSHIP)

Distribution: (continued)

SNDL	FKP16	(NAVSSES)
	FKP18	(NAVSEAADSA)
	FKQ8	(NAVMASSO (NMSSO-00))
	FKR	(Shore Activities under the Command of COMNAVAIRSYSCOM as delegated by the CNO (less FKR6A, FKR6B))
	FKR6A	(NAVAIRWARCENACDIV (Patuxent River))
	FKR6B	(NAVAIRWARCENWPNDIV (China Lake)(NWC-2152))
	FO1	(COMNAVLEGSVCCOM)
	FS1	(ONI)
	FT1	(NETC)
	FT10	(NAVAVSCOLSCOM)
	V12	(Deputy Commandant, Combat Development)
	V23	(COMMARCORLOGBASES Albany GA)
	V28	(CG, MARCORSYSCOM)
		(COMMARCORLOGCOM)

U S Atlantic Command (J631)
1562 Mitscher Ave Suite 200
Norfolk VA 23551-2488

Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics), (Director, Acquisition Resources and Analysis)

Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics), (Director, Defense Procurement and Acquisition Policy)

Director, Marine Corps Operational Test and Evaluation Activity
3035 Barnett Ave
Quantico VA 22134-5014

Defense Technical Information Center
8725 John J Kingman Road Suite 0944
Fort Belvoir VA 22060-6218

National Technical Information Service
5285 Port Royal Road Room 300F
Springfield VA 22161

Chapter 1
Table of Contents

Chapter 2
Capabilities Development and Acquisition Management Processes

References:
(a) U.S. Navy Regulations, 1990 (NOTAL)
(b) Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01D, "Joint Capabilities Integration and Development System," 12 Mar 04 (NOTAL)
(c) Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3170.01A, "Operation of the Joint Capabilities Integration and Development System," 12 Mar 04 (NOTAL)
(d) OPNAVINST 5420.108B, "Chief of Naval Operations (CNO) Executive Decision Process," 9 Mar 01 (NOTAL)
(e) SECNAVINST 5400.15A, "DON Research, Development and Acquisition and Associated Life Cycle Management Responsibilities," 26 May 95 (NOTAL)
(f) SECNAVINST 5200.40, "Validation, Verification, and Accreditation (VV&A) of Models and Simulations," 19 Apr 99 (NOTAL)
(g) SECNAVINST 5000.36, "Department of the Navy Data Management and Interoperability," 1 Nov 01 (NOTAL)
(h) Under Secretary of the Navy Memorandum, "Designation of Department of the Navy (DON) Functional Area Managers," 14 May 02 (NOTAL)
(i) DoD Directive 4630.5, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 5 May 04 (NOTAL)
(j) OPNAVINST 3050.23, "Alignment and Responsibility of Navy Requirements Generation and Resource Planning," 5 Nov 01 (NOTAL)
(k) Marine Corps Order (MCO) 3900.15A, "Marine Corps Expeditionary Force Development System," 26 Nov 02 (NOTAL)
(l) USD(P&R) Memorandum, "Interim Policy and Procedures for Strategic Manpower Planning and Development of Manpower Estimates," 10 Dec 03 (NOTAL)
(m) CJCSI 6212.01C, "Interoperability and Supportability of Information Technology and National Security Systems," 20 Nov 03 (NOTAL)
(n) DoD Instruction 5000.2, "Operation of the Defense Acquisition System," 12 May 03 (NOTAL)
(o) DoD Directive 5000.1, "The Defense Acquisition System," 12 May 03 (NOTAL)
(p) NAVSO P-35, "DON Publications and Printing Regulations," May 79 (NOTAL)
(q) OPNAVINST 3104.1, "Naval Visual Information and Combat Camera Program (NAVIP) Policy and Responsibilities," 9 Feb 01 (NOTAL)

(r) SECNAVINST 5420.188E, "Acquisition Category (ACAT) Program Decision Process," 11 Dec 97 (NOTAL)
(s) SECNAVINST 4105.1A, "Independent Logistics Assessment (ILA) and Certification Requirements," 5 Mar 04 (NOTAL)
(t) USD(AT&L) memorandum, "Total Life Cycle Systems Management and Performance Based Logistics," 24 Oct 03 (NOTAL)
(u) SECNAVINST 5710.23C, "Implementation of, and Compliance with, Arms Control Agreements," 21 Sep 02 (NOTAL)
(v) Under Secretary of the Air Force Document, "National Security Space Acquisition Policy 03-01," 6 Oct 03 (NOTAL)

2.1 Capabilities Development Process

Department of the Navy (DON) acquisition programs use a capability-based approach to define, develop, and deliver technologically sound, sustainable, and affordable military capability. This approach, implemented via the Naval Capability Development Process (NCDP), Expeditionary Force Development System (EFDS), and Joint Capabilities Integration and Development System (JCIDS), improves existing warfighting capabilities and develops new warfighting capabilities that are highly relevant and resource leveraged. Coordination among Department of Defense (DOD) Components is an essential element of these processes. Joint concepts and integrated architectures are used to identify and prioritize capability gaps and integrated doctrine, organization, training, materiel, leadership, personnel, and facilities (DOTMLPF) solutions. Paragraph 2.1 and applicable references outline the major roles and responsibilities and provide the process for DON capability development.

2.1.1 DON Principal Capability Points of Contact

2.1.1.1 Chief of Naval Operations (CNO)/Commandant of the Marine Corps (CMC) Responsibilities

In their role as user representative, CNO/CMC shall execute their responsibilities as defined in references (a), (b), (c), (d), (e), and (f) to identify, define, validate, and prioritize mission requirements/capability needs and allocate program resources to meet those requirements and needs through the Planning, Programming, Budgeting, and Execution System (PPBES). In addition, CNO and CMC shall coordinate the test and evaluation process. Continuous interaction with the Assistant Secretary of the Navy (Research, Development and Acquisition) (ASN(RD&A)) is required throughout the acquisition process.

2.1.1.2 Navy Program and Resource Sponsor Responsibilities

Program sponsors are responsible for identifying Navy program requirements. They shall provide the key interface between the JCIDS, the PPBES, and the Defense Acquisition System. A requirements officer (RO) shall be assigned for each platform or system. The resource sponsors are responsible for managing specific appropriation categories. Resource sponsors may also have dual responsibility as program sponsors.

The program sponsor, in coordination with the resource sponsor, shall:

1. Act as the user representative,

2. Establish user-based cost, schedule, and performance requirements and associated documentation,

3. Provide explicit direction for the operations and support environment associated with all capability needs,

4. Program the funds necessary to develop and sustain programs that satisfy capability needs,

5. Define the thresholds and parameters for operational testing, and

6. For information technology (IT) systems, including National Security Systems (NSS):

a. Ensure capability documents are reviewed by DON Functional Area Managers (FAMs) per references (g), (h), and (i). A current list of FAMs responsible for each respective naval functional area is available at the DON CIO website (www.doncio.navy.mil).

b. Define mission-related, outcome-based performance measures for IT systems, including NSS.

2.1.1.3 Deputy CNO (Resources, Requirements and Assessments) (CNO (N8)) Responsibilities

The Deputy CNO (Resources, Requirements and Assessments) CNO (N8) shall coordinate staffing, validation, and approval of Navy capability documents, including Initial Capabilities Documents (ICDs), Capability Development Documents (CDDs), and Capability Production Documents (CPDs) for all Navy acquisition programs within the JCIDS process discussed in references (b) and (c).

For those documents assigned a Joint Potential Designator (JPD) of Joint Requirements Oversight Council (JROC) Interest, the approval and validation authority shall be the JROC. The JROC may delegate approval authority for non-Key Performance Parameter (KPP) changes to the Navy. JROC review of "JROC Interest" CDDs and CPDs is required any time a recommendation is

made to change a KPP. For documents assigned a JPD of Joint Integration or Independent, the CNO/CMC will be designated as the approval and validation authority.

Additionally, CNO (N8) will coordinate the Navy staffing of capability documents developed by other Services.

2.1.2 DON Capabilities Development and Processing Procedures

See the Operation of the Joint Capabilities Integration and Development System, reference (c) for capabilities documentation development procedures

2.1.2.1 Naval Capability Development Process

The Naval Capability Development Process (NCDP), per reference (j), translates strategic guidance and operational concepts to specific warfighting capabilities. The NCDP is a capabilities-based assessment methodology used to develop the naval warfare Integrated Strategic Capability Plan (ISCP). The ISCP serves as the Navy's "warfare investment strategy" for programming operational capabilities. The product of the ISCP and resource sponsor programming and analysis will be the Sponsor Program Proposal (SPP), detailing systems required to deliver the warfighting capabilities identified in the ISCP. These systems will be acquired through the DOD acquisition process.

2.1.2.2 Marine Corps Capabilities Development Process for Programs with Navy Fiscal Sponsorship

For capabilities development process with Marine Corps fiscal sponsorship, see reference (k). The following specific procedures shall apply to Marine Corps programs that have Navy fiscal sponsorship (e.g., aviation programs). The capabilities documents shall be prepared and submitted by the CMC (Deputy Commandant, Combat Development (DC,CD)) to the applicable OPNAV program sponsor, via CNO (N810), for concurrence, prioritization, staffing, and endorsement. CMC (DC,CD) shall coordinate validation and approval as follows:

1. JCIDS documents with a JPD designation of JROC Interest shall be approved and validated by the JROC. The JROC may delegate approval authority for non-Key Performance Parameter (KPP) changes to the Marine Corps. JROC review of "JROC Interest" CDDs and CPDs is required any time a recommendation is made to change a KPP. Marine Corps programs designated JROC Interest shall be endorsed by CNO (N8) and shall be reviewed by the Assistant CMC (ACMC), Vice CNO (VCNO), and CNO; shall be approved by the CMC when such authority is delegated by the JROC.

2. JCIDs documents with a JPD designation of Joint Integration or Independent shall be endorsed by CNO (N8) and shall be forwarded to CMC (DC,CD) for final approval and validation processing. Approval and validation of Marine Corps

ICDs and CDD/CPDs designated Joint Integration and Independent shall be accomplished by ACMC.

2.1.2.3 Weapon and Information Technology Systems Capabilities Development and Processing Procedures

The milestone decision authority (MDA) may approve entry into the DOD acquisition process at Concept Refinement or may approve proceeding directly to a Milestone A, B, C, or a Full-Rate Production Decision Review (FRP DR). This decision will be based on the results of an analysis of alternatives, technology development strategy, or acquisition strategy.

An ICD shall be approved prior to a concept decision. An ICD is required to support the concept refinement phase of the acquisition system, including the analysis of alternatives, the technology development strategy, and the subsequent Milestone A acquisition decision. When a program enters the acquisition system at a point other than the concept refinement phase, an ICD will be generated in accordance with reference (b).

An approved ICD and CDD or CPD are required before initiating an acquisition category (ACAT) program. Programs initiated at Milestone B require a CDD. Programs initiated at Milestone C (or later) require a CPD. Normally program initiation will occur at Milestone B, but may occur at the start of Technology Development, Milestone A, for shipbuilding programs. For shipbuilding programs not started at Milestone A, the CDD will be approved prior to the start of functional design. See references (b) and (c) for additional guidance on ICDs, CDDs, and CPDs.

Capability needs may be evolutionary in nature and become more refined as a result of analysis of alternatives and test program updates as the program proceeds. The analysis of alternatives plan shall specify the use of a CNO (N8) or CMC (Commanding General, Marine Corps Combat Development Command (CG, MCCDC)) accredited campaign analysis model, if required, per reference (f). The program sponsor shall apply the results of the analysis of alternatives to identify performance parameters and potential system(s) that would satisfy the need. The ICD and its subsequent analysis of alternatives shall provide the general framework for the derivation of the CDD/CPD performance parameters. Cost as an independent variable (CAIV) concept shall be considered in tradeoff analyses when conducting analysis of alternatives. The CDD/CPD shall delineate performance parameters and critical systems characteristics, in terms of thresholds and objectives.

The CDDs/CPDs must be validated and approved before each Milestone B and Milestone C decision, respectively. This validation and approval will be per reference (b). Changes to these documents, not supporting a milestone decision, will be validated and approved by the appropriate approval and validation

authority based on the type of change, program ACAT level, and Joint Potential Designator. Capability document changes will be developed and managed by CNO program sponsors/CMC (DC,CD). Approval and validation of these changes shall be coordinated with CNO (N8) in the case of Navy programs.

Supportability and manpower may be key performance parameters (KPPs) for selected systems. For Navy programs the determination will be jointly made by the program sponsor and the Fleet Readiness and Logistics Sponsor (CNO (N4)) or the Manpower Sponsor (CNO (N1)), respectively. Program sponsors should assume a default consideration for supportability and manpower KPPs unless they obtain prior agreement with the CNO (N4) or CNO (N1) Sponsors. Sponsors will submit unresolved KPP issues to the 3-Star Board of Directors (BOD) for resolution. For Marine Corps programs, the determination will be made by CMC (DC,CD), in consultation with the affected Headquarters Marine Corps (HQMC) and CNO staff elements as appropriate. Unresolved KPP issues will be presented to the Marine Requirements Oversight Council for resolution.

Manpower requirements are a significant element of operations and support costs and as such are key in affordability considerations. Manpower thresholds and objectives shall be established so as to encourage options that maximize the use of technology in reducing manpower, personnel, and training (MPT) requirements and total ownership costs. Personnel inventory shortfalls (i.e., unique skills sets) or manpower requirements that may impact end strength, shall be identified as early as possible in the capability development process. DOTMLPF analyses, conducted as the first step in the Functional Solutions Analysis (FSA) of an ICD, shall address all eight human systems integration (HSI) domains as specified in enclosure (7) of this instruction. Manpower estimates for acquisition programs shall be developed using reference (l).

All IT systems, including NSS, or IT services acquired, procured, or operated by DON shall comply with reference (m). CDD/CPDs for IT programs, including NSS programs, shall include clearly defined interoperability and supportability requirements and shall be staffed for review of the Net-Ready (NR) KPP per reference (m). Interoperability and supportability certifications are required prior to the FRP DR.

2.1.2.4 Fleet Modernization Program

The Fleet Modernization Program (FMP) shall follow the procedures of this instruction for acquisition programs.

2.2 Acquisition Management Process

2.2.1 General Purpose

This enclosure establishes a model for managing all DON

acquisition programs that are divided into two categories: weapon system and IT system. The management model acknowledges that every acquisition program is different and the program manager (PM) and the MDA shall structure the program to ensure a logical progression through acquisition phases defined in references (n) and (o). See references (n) and (o) for implementation requirements for all DON ACAT programs.

For purposes of this instruction, a "weapon system" is a host platform (e.g., ship or aircraft), missile, weapon, munitions, training system, combat system, subsystem(s), component(s), equipment(s), associated software, or item(s) that may be acquired collectively or individually. An "IT system" includes automated information system (AIS) and IT systems such as electronic commerce/electronic data interchange, non-tactical networks, Defense Messaging System, base level infrastructure, etc.

2.2.2 Specific Application

The acquisition process defined in this instruction applies to all DON programs managed by DON organizations, including activities operating on a reimbursable, non-appropriated, or cost-recovery basis. IT programs funded by direct citation of funds from one or more Foreign Military Sales (FMS) case(s) are exempt.

Programs that are part of a specified system of systems (SoS) or a family of systems (FoS) as defined in references (b) and (c) will be of special interest to the MDA. A SoS or FoS will normally have specific mission capabilities known as mission capability packages (MCPs) as described by reference (j).

Acquisition of electronic publishing, printing, and micropublishing equipment and services, which are subject to the Congressional Joint Committee on Printing notification requirement, shall be managed concurrently under both this instruction and reference (p). Acquisition of Visual Information (VI) productions and equipment is prohibited except as authorized in reference (q).

2.3 Overview of the Acquisition Management Process

ASN(RD&A) is the DON Component Acquisition Executive (CAE) and is responsible for all DON research, development, and acquisition. ASN(RD&A) is the MDA for ACAT IC, IAC, and II acquisition programs. For ACAT III, IV, and abbreviated acquisition programs (AAPs), ASN(RD&A) delegates MDA and program decision authority (PDA) to Program Executive Officers (PEOs), Commanders of Systems Commands (SYSCOM Commanders), and Direct Reporting Program Managers (DRPMs). ASN(RD&A)-designated PEOs, SYSCOM Commanders, DRPMs, and other designees are responsible for executive management of assigned acquisition programs and will assign PMs to execute acquisition programs in accordance with

approved cost, schedule, and performance thresholds set in the acquisition program baseline (APB).

The MDA shall conduct milestone reviews for all DON assigned ACAT programs. At program initiation or prior to if possible, the PM shall propose to the MDA appropriate program decision points, advise of mandatory program information to be presented at proposed decision points, and propose any discretionary program information considered essential for the MDA to make an informed decision. Based on technology maturity and acquisition strategy, a program may enter the acquisition process at any decision point. See paragraph 2.5 of this enclosure for information on tailoring of program information content. Prior to each subsequent program decision point, the PM shall provide the MDA with the opportunity to review the program information required to assess program status and support a decision for the upcoming review. Per reference (r), integrated product teams (IPTs) or acquisition coordination teams (ACTs) shall be established by the MDA or PM, or designated official if a PM has not been assigned, as an advisory body to the MDA per the criteria of paragraphs 2.3.1 or 2.3.2.

2.3.1 IPTs

IPTs are an integral part of the defense acquisition process used to maintain continuous and effective communications and to execute programs. IPTs may address issues regarding requirements/capability needs, acquisition strategy and execution, financial management, etc. MDAs and PMs are responsible for making decisions and leading execution of their programs through functional IPTs. The PM shall structure, tailor, and lead IPTs to resolve issues, provide assessments, and execute programs at the lowest level. See reference (o), paragraphs E1.2 and E1.20, for IPT implementation requirements for DON ACAT programs. There are generally two levels of IPTs: overarching IPTs (OIPTs) and working IPTs (WIPTs).

2.3.1.1 OIPTs

OIPTs are established by the MDA for ACAT ID and IAM programs to evaluate the overall program prior to a milestone or formal program review, to address issues that may impact milestone or program review decisions, and to facilitate program communications among major stakeholders as required by reference (n), paragraph 3.10.4.

2.3.1.2 WIPTs

WIPTs are formulated to address issues and needs in a specific functional/topic area or to address integration of all program functions. WIPTS may utilize working level staff, managers at various levels, and program support personnel.

Functional WIPTs generally focus on a particular topic such as cost/performance, design, test, or contracting. Members are selected based on their knowledge and/or responsibility in the designated focus area.

Integrating WIPTs (i.e., Integrating IPTs (IIPTs)) coordinate efforts across all functional areas. IIPTs are usually convened to address a specific issue before that issue is brought to the attention of an OIPT and/or a Defense Acquisition Board (DAB).

2.3.2 Acquisition Coordination Teams (ACTs)

The ACT is a team of stakeholders from the acquisition community who represent the principal advisors to the MDA. An ACT shall be established for each DON ACAT IC, IAC and II program. For ACAT ID and IAM programs, an ACT is not required since its role resides with the OSD OIPT.

ACTs are co-chaired by the cognizant Deputy Assistant Secretary of the Navy (DASN) or DASN action officer and the program manager (PM) (or a PM's representative). Prior to the assignment of a PM, the ACT shall be co-chaired by an appropriate program sponsor (or a program sponsor's representative)

ACT members shall be empowered and authorized by the executing commands to make commitments for the organizations they represent, and are responsible for keeping their principals appraised of the program status. The ACT does not replace the PM's integrated product teams (IPT) and it shall not abrogate the responsibility of the PM nor delay or prevent unresolved issues from being raised to the MDA.

2.4 Categories of Acquisition Programs and Milestone Decision Authorities

An ACAT designation shall be assigned per this enclosure after approval of a capabilities document establishing the need for a new program. While a proposed ACAT designation shall be provided on the cover of the Initial Capabilities Document (ICD) and the proposed CDD, the cognizant PEO/SYSCOM/DRPM/PM, or designee, shall request an ACAT designation or designation change as appropriate. ACAT designations shall be forwarded as soon as they are approved to ASN(RD&A) Acquisition Programmatics and Analysis (APA) for input into the ASN(RD&A) Acquisition Program listing.

Reference (n), enclosure 2, and Table E2T1 of this instruction, provide the description, dollar thresholds, and the decision authority for ACAT I-IV acquisition programs and AAPs. The category of an acquisition program shall generally be determined based upon an assessment of cost, complexity, and risk. Potential ACAT programs are not to be artificially divided into separate entities for the purpose of qualifying as lower

ACAT categories, or as AAPs.

For ACAT programs that are also joint programs, see enclosure (9) for implementation requirements.

ASN(RD&A) shall resolve any question of classification of a program below the ACAT I or IA level, or potential program, as a weapon system or IT system acquisition program.

Once a program has delivered greater than 90 per cent of its total quantity and/or expended greater than 90 per cent of total program cost (RDT&E and procurement as defined in the APB), the PM should request from OASN(RD&A) APA that the program be removed from the ASN(RD&A) ACAT listing.

2.4.1 ACAT I (Major Defense Acquisition Program (MDAP))

The USD(AT&L) designates MDAPs as ACAT ID or ACAT IC. The USD(AT&L) is the MDA for ACAT ID (Defense Acquisition Board) programs. ASN(RD&A) is the MDA for ACAT IC (Component) programs. See reference (n), enclosure 2, for implementation requirements for DON ACAT I programs.

2.4.2 ACAT IA (Major Automated Information System (MAIS))

The Assistant Secretary of Defense (Networks and Information Integration) (ASD(NII)) is the DOD CIO and designates MAIS programs as ACAT IAM or ACAT IAC and is the MDA for ACAT IAM programs. The ASN(RD&A) is the MDA for DON ACAT IAC programs unless this authority is specifically delegated. See reference (n), enclosure 2, for implementation requirements for DON ACAT IA programs.

2.4.3 ACAT II

ACAT II programs are major system programs that do not meet the criteria for an ACAT I program. ASN(RD&A) shall designate ACAT II programs and shall serve as MDA for such programs unless this authority is specifically delegated. By definition, there are no IT ACAT II programs. See reference (n), enclosure 2, for implementation requirements for DON ACAT II programs.

2.4.4 ACAT III

PEOs, SYSCOM Commanders, and DRPMs shall designate ACAT III programs and may delegate MDA authority for such programs to a designated flag officer or SES official. ASN(RD&A) APA shall be notified of all ACAT III program designations for entry into the ASN(RD&A) Acquisition Program listing.

2.4.5 ACAT IV

There are two categories of ACAT IV programs. ACAT IVT

(Test) programs require operational test and evaluation (OT&E), while ACAT IVM (Monitor) programs do not. Commander, Operational Test and Evaluation Force (COMOPTEVFOR) or Director, Marine Corps Operational Test and Evaluation Activity (Director, MCOTEA) may elect to monitor ACAT IVM programs.

PEOs, SYSCOM Commanders, and DRPMs shall designate ACAT IV programs and may delegate MDA authority for such programs to a designated flag officer, SES official, or to the PM. The OTA (COMOPTEVFOR or Director, MCOTEA) shall concur in writing with all ACAT IVM designations. All disputes concerning ACAT IV designations shall be arbitrated by the CNO (N091) through the Test and Evaluation Coordination Group (TECG) process.

The office of ASN(RD&A) (APA) shall be notified of all ACAT IV program designations for entry into the ASN(RD&A) Acquisition Program listing.

2.4.6 Abbreviated Acquisition Programs (AAPs)

Small DON acquisitions and modifications may be designated an AAP if they do not require OT&E and they meet dollar threshold and other criteria in Table E2T1 below. The OTA must concur in writing that OT&E is not required.

2.4.6.1 Weapon System and IT System AAP Procedures

Potential ACAT programs shall not be artificially divided into separate entities for the purpose of having the entities qualify as separate AAPs. PEOs, SYSCOM Commanders, DRPMs, and flag officers or SES designees are assigned program decision authority (PDA) for AAPs and shall designate AAP weapon system and IT system programs unless ASN(RD&A) elects to retain or otherwise delegate this authority. PDA may be delegated to the PM. Prior to final approval of an AAP designation, the OTA (COMOPTEVFOR or Director, MCOTEA) shall concur in writing that OT&E is not required. The CNO (N091) will arbitrate disputes concerning the need for OT&E per the TECG process. In addition, ASN(RD&A) or designated MDA may elect to treat any program meeting the AAP criteria listed in Table E2T1 as an ACAT program if circumstances warrant, such as joint service involvement or high risk, or if greater visibility is justified.

Designated PEOs, SYSCOM Commanders, and DRPMs shall be responsible for developing AAP policies and procedures for assignment of PDAs, conducting program reviews, and reporting and tracking program status. The PDA shall document all major program decisions. Only ASN(RD&A) shall assign PDA to organizations other than SYSCOM Commanders, PEOs, and DRPMs.

AAPs shall not be initiated without funding and a written requirement. As a minimum, requirements or capabilities shall be documented by a sponsor and approved at the appropriate level (e.g., CNO (program sponsor)/CMC (DC,CD)).

The PM for AAPs shall: conduct a tailored manpower, personnel, and training (MPT) analysis (per Military Standard 464 (MIL-STD-464)); conduct a tailored analysis of the system's ability to operate in the intended electromagnetic environment; establish a system safety program tailored (per MIL-STD-882) to identify environmental, safety, and occupational health hazards; complete Clinger-Cohen Act (CCA) compliance and information assurance strategy for IT systems, including NSS; complete IT registration for mission-critical and mission-essential IT systems, including NSS; and provide any other statutory or program information required by the PDA. The PM shall comply with the DOD PPBES and configuration management requirements and reporting procedures.

2.4.7 **Program Modifications**

Table E2T2 and paragraph 2.5.5 of this enclosure provide guidance for implementation and documentation of weapon system and IT system modifications.

Table E2T1 Description and Decision Authority for ACAT I-IV and AAP Programs

Acquisition Category	Criteria for ACAT or AAP Designation	Decision Authority

ACAT I	• Major Defense Acquisition Programs (MDAPs) (10 USC 2430)
	  • RDT&E total expenditure > $365 million in FY 2000 constant dollars, or
	  • Procurement total expenditure > $2.190 billion in FY 2000 constant dollars, or
	• USD(AT&L) designation as special interest
		ACAT ID: USD(AT&L)
		ACAT IC: SECNAV, or if delegated, ASN(RD&A) as the CAE

ACAT IA	• Major Automated Information Systems (MAISs)
	  • Program costs/year (all appropriations) > $32 million in FY 2000 constant dollars, or
	  • Total program costs > $126 million in FY 2000 const. dollars, or
	  • Total life-cycle costs > $378 million in FY 2000 constant dollars
	• ASD(NII) designation as special interest
		ACAT IAM: ASD(NII)/DoD CIO
		ACAT IAC: ASN(RD&A), as delegated by the DoD CIO

ACAT II	• Does not meet the criteria for ACAT I
	• Major Systems (10 USC 2302(5))
	  • RDT&E total expenditure > $140 million in FY 2000 constant dollars, or
	  • Procurement total expenditure > $660 million in FY 2000 constant dollars, or
	• ASN(RD&A) designation as special interest
	• Not applicable to IT system programs
		ASN(RD&A), or the individual designated by ASN(RD&A)

ACAT III	• Does not meet the criteria for ACAT II or above
	• Weapon system programs:
	  • RDT&E total expenditure ≤ $140 million in FY 2000 constant dollars, or
	  • Procurement total expenditure ≤ $660 million in FY 2000 constant dollars, and
	  • Affects mission characteristics of ships or aircraft or combat capability
	• IT system programs:
	  • Program costs/year ≥ $15 million ≤ $32 million in FY 2000 constant dollars, or
	  • Total program costs ≥ $30 million ≤ $126 million in FY 2000 constant dollars, or
	  • Total life-cycle costs ≤ $378 million in FY 2000 constant dollars
		Cognizant PEO, SYSCOM Commander, DRPM, or designated flag officer or senior executive service (SES) official.
		
		ASN(RD&A), or designee, for programs not assigned to a PEO, SYSCOM, or DRPM.

ACAT IVT	• Does not meet the criteria for ACAT III or above
	• Requires operational test and evaluation
	• Weapon system programs:
	  • RDT&E total expenditure ≤ $140 million in FY 2000 constant dollars, or
	  • Procurement total expenditure ≤ $660 million in FY 2000 constant dollars
	• IT system programs:
	  • Program costs/year < $15 million, or
	  • Total program costs < $30 million, or
	  • Total life-cycle costs ≤ $378 million in FY 2000 constant dollars
		Cognizant PEO, SYSCOM Commander, DRPM, or designated flag officer, SES official, or PM.
		
		ASN(RD&A), or designee, for programs not assigned to a PEO, SYSCOM, or DRPM.

ACAT IVM	• Does not meet the criteria for ACAT III or above
	• Does not require operational test and evaluation as concurred with by OTA
	• Weapon system programs:
	  • RDT&E total expenditure ≥ $10 million ≤ $140 million in FY 2000 constant dollars, or
	  • Procurement expenditure ≥ $25 million/year ≥ $50 million total ≤ $660 million total in FY 2000 constant dollars
	• Not applicable to IT system programs
		Cognizant PEO, SYSCOM Commander, DRPM, or designated flag officer, SES official, or PM.
		
		ASN(RD&A), or designee, for programs not assigned to a PEO, SYSCOM, or DRPM.

Abbreviated Acquisition Program	• Does not meet the criteria for ACAT IV or above
	• Does not require operational test and evaluation as concurred with in writing by OTA
	• Weapon system programs:
	  • Development total expenditure < $10 million, and
	  • Production or services expenditure < $25 million/year, < $50 million total
	• IT system programs:
	  • Program costs/year < $15 million, and
	  • Total program costs < $30 million
		Cognizant PEO, SYSCOM Commander, DRPM, or designated flag officer, SES official, or PM.
		
		ASN(RD&A), or designee, for programs not assigned to a PEO, SYSCOM, or DRPM.

2.5 Capability Concept Development and Program Decision Points and Phases

2.5.1 User Needs and Technology Opportunities

Mission needs identify deficiencies in current operational capabilities. A MCP is an operational commander's view of an integrated FoS or SoS as described by reference (j). MCPs shall be the principal mechanism for achieving alignment and synchronization across elements that form capabilities critical to Navy and Joint strategies per references (b) and (c).

Naval capability/warfare sponsors and the Chief of Naval Research shall identify projected deficiencies and future naval capabilities (FNC) that require investment in Science and Technology (S&T) projects. The most viable S&T projects should be expeditiously demonstrated and transitioned into new and legacy systems to support the warfighter and reduce system total ownership cost. See reference (n), paragraphs 3.4 and 3.6, for implementation of technology opportunities activities during pre-systems acquisition.

In developing system requirements/capability needs, consideration shall be given to modifying performance requirements to permit international cooperation, either through information exchange, research and development, international agreements, foreign comparative testing, or industrial cooperation. Industrial base assurance factors shall be considered per DON's critical infrastructure protection (CIP) initiative.

If the potential solution to a newly identified need could result in new or significantly modified IT systems, including NSS, the appropriate IT FAMs listed at the DON CIO website (www.doncio.navy.mil) shall review the documented need to ensure compliance with appropriate mission/business area architecture and coordinate with principal staff assistants (PSAs) for joint potential. IT programs are discussed in enclosure (4) of this instruction.

See reference (n), paragraphs 3.2.1, 3.4, and 3.6.4, and reference (c) for implementation of the capabilities integration and development process.

2.5.2 Program Tailoring

All MDAs should promote maximum flexibility in tailoring programs under their oversight.

Prior to formal program initiation (normally Milestone B) and after consideration of the views of the ACT/IPT members, the PM shall propose a tailored execution, management, and oversight structure for the program. The PM proposal shall consider program size, complexity, system service-life, and associated

risk. The MDA shall approve in writing the proposed tailored execution, management, and oversight structure. The MDA determinations made at program initiation shall be reexamined at each program decision point in light of then-current program conditions.

Required program information for all DON ACAT programs shall be determined using the concept of "tailoring in" (versus "tailoring out") program information, i.e., there is no program information required beyond: (1) that required by statute and regulation (reference (n)); (2) this instruction, enclosure (3), Tables E3T1, E3T2, and E3T3; and (3) any additional information required by the MDA.

What to "tailor in" in terms of the discretionary content of mandatory program information will vary for each ACAT program. Tables E3T1, E3T2, and E3T3 in this instruction, enclosure (3), provide the mandatory program information for those DON ACAT programs listed in the "ACAT" column, along with guidance as to whether the presentation medium is mandatory or at the discretion of the MDA.

2.5.3 Program Decision Points Tailoring

The MDA must rigorously evaluate a program's core activities before making a program decision. The MDA shall establish tailored program decision points for each ACAT program as early as possible in the program life cycle. An ACAT program does not require a set number of program decision points.

Department of the Navy new start ACAT programs shall follow the acquisition life-cycle model established by reference (n). Ongoing ACAT programs will follow the guidance provided in paragraph 4.3.1 of reference (o) and paragraph 3.1.1 of reference (n). Ongoing programs started under the pre-23 October 2000 acquisition model, but which had not yet reached Milestone II as of 12 May 03 (the date of reference (n)), are required to convert to the acquisition model of reference (n) at the start of System Development and Demonstration, Milestone B. Ongoing programs that were started under the pre-23 October 2000 acquisition model and were past Milestone II as of 12 May 03, may continue to Milestone III, but shall satisfy the statutory and regulatory requirements of this instruction, enclosure (3), Tables E3T1, E3T2, and E3T3 for FRP DR.

The MDA shall not approve program initiation or entry into any phase that requires milestone approval for any ACAT program that contains a Mission-Critical (MC) or Mission-Essential (ME) IT system, including NSS, until the DOD CIO (for ACAT IA programs) certifies or the DON CIO (for ACAT I and II programs) or the SYSCOM or organization CIO (for ACAT III and IV programs) confirms that the system is being acquired in compliance with the Clinger-Cohen Act (CCA).

See reference (n), paragraphs 3.1 through 3.10, for implementation requirements for pre-systems acquisition, systems acquisition, and sustainment of DON ACAT programs.

2.5.4 Program Decision Points and Phases

2.5.4.1 Concept Decision

At Concept Decision, the MDA approves the initiation of the Concept Refinement phase. When applicable, an AoA shall be conducted in the context of a SoS or FoS. An AoA shall be designed to show the value of each individual system in a SoS or FoS and its contribution to a mission capability package. Where appropriate, each individual system shall be analyzed using multiple concepts for that system. See reference (n), paragraph 3.5, for implementation requirements for pre-systems acquisition of potential DON ACAT programs at this decision point.

2.5.4.2 Concept Refinement

The most promising systems concepts shall be defined, in part, by broad objectives for performance and the identification of interoperability and integration requirements within a FoS or SoS. ASN(RD&A) CHENG shall assist the requirements officer (RO) and the PM, or designee, with the translation of these concepts into operational and systems architectures and the associated component advanced development.

An analysis of alternatives (AoA) shall be conducted to assess how alternative approaches to a proposed Navy or Marine Corps system contribute to the total mission capability of a SoS or a FoS. Program documentation for a program that is part of a SoS or FoS shall be developed and written in the SoS or FoS context. The RO and the PM should develop a System Performance matrix for the most promising alternative to support the preparation of the corresponding capstone requirements document (when required by the JROC), CDD(s), and APB(s). See reference (n), paragraph 3.5, for concept refinement implementation requirements for pre-systems acquisition.

2.5.4.3 Milestone A

Milestone A occurs at the completion of the Concept Refinement phase. At Milestone A, an MDA review will be held to evaluate the results of the AoA, technology maturity, technical risk, and international availability or potential for international cooperation; to approve the preferred system solution and technology development strategy; and to authorize entry into the Technology Development phase. See reference (n), paragraph 3.6, for implementation for pre-systems acquisition of potential DON ACAT programs at this milestone. The MDA may approve program initiation for shipbuilding programs at Milestone A, the beginning of the Technology Development phase. See reference (n), paragraph 3.6.3, for implementation requirements

for shipbuilding program initiation.

2.5.4.4 Technology Development

Technology development is normally part of pre-systems acquisition effort conducted prior to program initiation. Shipbuilding programs may be initiated at Milestone A in order to start Ship Design concurrent with sub-system/component technology development. See reference (n), paragraph 3.6, for technology development implementation requirements for pre-systems acquisition. See reference (n), paragraph 3.6.3, for implementation requirements for shipbuilding program initiation that will take place at entry to or during the Technology Development phase.

2.5.4.5 Milestone B

Milestone B occurs at the completion of the Technology Development phase. At Milestone B, an MDA review will be held to assess technology maturity and technical risk for entry into System Development and Demonstration. At Milestone B, the MDA normally approves program initiation, the LRIP strategy, and initial LRIP quantities for which LRIP will be requested at Milestone C. An evolutionary acquisition strategy is the preferred approach to satisfy time-phased CDDs; however, a single step to a full capability acquisition strategy may be used whether or not CDDs are time-phased. In the case of shipbuilding, lead and initial follow ships are normally approved at Milestone B. The follow ships that are approved at Milestone B shall be sufficient quantities to maintain shipyard construction continuity until the FRP Decision Review (DR). Critical sub-systems such as combat systems shall be demonstrated prior to lead and follow ship installation as directed by the MDA given the level of technology maturity and the associated risk. See reference (n), paragraphs 3.7.1 and 3.7.2, for Milestone B implementation requirements for systems acquisition of DON ACAT programs.

2.5.4.6 System Development and Demonstration

PMs of systems within a SoS or a FoS shall coordinate with each other to provide sufficient information to the ASN(RD&A) and the MDAs so that appropriate decisions can be made across platform and system domains. See reference (n), paragraph 3.7, for system development and demonstration implementation requirements for systems acquisition of DON ACAT programs.

2.5.4.6.1 System Integration

ASN(RD&A) may designate selected programs for special interest. These programs may be components of a specified FoS or SoS. During the System Development and Demonstration phase, the ASN(RD&A) CHENG shall assist these programs by reviewing functional designs and interface specifications that impact

system interoperability. Assistance will be provided through the program's established IPT or ACT process.

See reference (n), paragraph 3.7.3, for system integration implementation requirements for systems acquisition of DON ACAT programs.

2.5.4.6.2 Design Readiness Review

The Design Readiness Review provides an opportunity for mid-phase assessment of design maturity. Major system integration issues have been addressed and programs are preparing for the system demonstration effort. MDAs may determine the form and content of the design readiness review. See reference (n), paragraph 3.7.4, for implementation requirements for systems acquisition of DON ACAT programs.

2.5.4.6.3 System Demonstration

This effort is intended to demonstrate the ability of the system to operate in a useful way consistent with approved KPPs. See reference (n), paragraph 3.7.5, for system demonstration implementation requirements for systems acquisition of DON ACAT programs.

2.5.4.7 Milestone C

Milestone C occurs at the completion of the System Development and Demonstration phase. At Milestone C, an MDA review will be held to evaluate program status, risk, and readiness to enter the Production and Deployment phase. At Milestone C, the MDA approves one of the following: (1) LRIP for those programs that require LRIP, (2) full-rate production or procurement for those programs that do not require LRIP and have completed required initial operational test and evaluation (IOT&E), or (3) limited deployment for those IT programs or software-intensive programs with no production components, but that require completion of IOT&E. For those programs that do not require LRIP and have completed required IOT&E or for shipbuilding programs where follow ships are initially approved at Milestone B, Milestone C and the FRP DR may be combined into a single program decision point as long as all of the required program information for both Milestone C and FRP DR are satisfied. See reference (n), paragraphs 3.8.1, 3.8.2, and 3.8.3, for Milestone C and LRIP implementation requirements for systems acquisition of DON ACAT programs.

2.5.4.8 Production and Deployment

The purpose of this phase is to achieve an operational capability that satisfies mission needs. See reference (n), paragraph 3.8, for production and deployment implementation requirements for systems acquisition of DON ACAT programs.

2.5.4.8.1 Low-Rate Initial Production (LRIP)

The MDA shall initially justify and approve the LRIP quantities for all ACAT I, II, III, and IV programs as part of the Milestone B acquisition strategy and acquisition decision memorandum (ADM). With MDA approval, LRIP quantities may be adjusted to meet program requirements. If the approved acquisition strategy requires LRIP for ACAT III and IV programs, the LRIP quantity shall not be less than one complete unit. Further LRIP restrictions on ACAT programs are contained in reference (n), paragraph 3.8.3. See references (n) and (r) for specific ADM requirements for LRIP justification, cumulative LRIP quantities, and the percent of the total inventory objective that the cumulative LRIP quantities represent. LRIP procurement of greater than 10 per cent of a program's inventory objective shall be justified in the ADM, acquisition strategy, and Selected Acquisition Report (SAR) (for ACAT I programs).

2.5.4.8.2 FRP DR

A FRP DR is conducted prior to a program entering into FRP and Deployment. At the FRP DR, an MDA review will be held to evaluate program status, risk, and readiness to enter full-rate production/ procurement and deployment, or to authorize deployment for IT programs or software-intensive programs after completion of IOT&E. In the case of shipbuilding programs, the FRP DR shall be held to provide the MDA the results of the completion of IOT&E, authorize the construction of the remaining follow ships, and satisfy the requirements of this instruction, enclosure (3). See reference (n), paragraph 3.8.4, for FRP DR implementation requirements for systems acquisition of DON ACAT programs. See this instruction, enclosure (2), paragraph 2.5.4.7, for those cases where Milestone C and FRP DR are combined.

2.5.4.8.3 FRP and Deployment

See reference (n), paragraph 3.8.5, for production and deployment implementation requirements for systems acquisition of DON ACAT programs.

2.5.4.9 Operations and Support

2.5.4.9.1 Sustainment

Support concepts shall satisfy the program sponsor's specified requirements for sustaining support performance at the lowest possible life-cycle cost. Acquisition planning documents shall identify the plans, resources, and metrics that will be used to execute and measure the following four mandatory logistics support concepts for each evolutionary increment of capability to be delivered:

1. Minimal total life-cycle (ownership) cost to own and

operate,

2. Maintenance concepts that optimize both organic and industry sources,

3. Availability of support to meet warfighter-specified levels of war and peacetime readiness, and

4. Logistics support that sustains both short and long-term readiness

See reference (n), paragraph 3.9.2, for sustainment requirements for DON ACAT programs.

2.5.4.9.1.1 Sustainment Support

Program managers are responsible for Total Life Cycle Systems Management (TLCSM) to maintain system long-term readiness, increase reliability, and reduce the logistics footprint. Program managers shall develop and implement Performance Based Logistics (PBL) strategies as described in references (i), (o), and (s) and expanded upon in reference (t).

2.5.4.9.2 Disposal

Disposal planning occurs at the earliest possible stage in a system's life-cycle and shall consider the cost and risk of hazardous materials management and disposal. Systems shall be designed for safe, low cost disassembly.

2.5.5 Modifications

A modification to any active (i.e., not out-of-production) ACAT program, where the modification causes the program to breach an existing APB threshold, shall result in a revision to the APB and any other program information, as needed. Such modifications will normally be considered part of the modified ACAT program, but may be managed as a separate program at the discretion of the MDA. Any identified new functionality or capability must be identified in an approved capabilities document.

If the modification causes the program information to be changed, that information shall be revised and approved by the proper authority. Additionally, if the modification causes a change in ACAT level for the ongoing program, an ACAT designation change request shall be submitted for approval. See reference (n), paragraph 3.9.2.6, for implementation requirements for evolutionary sustainment of DON ACAT programs. PMs of programs that are part of a SoS or FoS shall assess the impact, including electromagnetic compatibility, of their respective system modifications on other systems within the SoS or FoS, and advise the affected MDAs, PEOs, and PMs.

A modification to an out-of-production program should be

treated as a separate program with its own assigned ACAT or AAP designation.

See the "Modification Process" Table E2T2 below for appropriate actions by the PM, CNO/CMC, and the MDA. Actions are based on criteria shown in the top row of Table E2T2.

Table E2T2 Modification Initiation Process Conditions
(Pick the row that most closely relates to your ongoing program characteristics and proposed modification)

ACAT Exists for pgm being modified?	Mod breaches APB threshold?	Mod requires additional funding? [7/]	Mod breaches "Abbreviated Acqn Program" $ threshold? [4/5/]	PM action	CNO/CMC action [6/]	Program Decision Authority or MDA action
YES	NO	NO	YES [5/] or NO	Execute mod	Approve CDD/CPD* [2/]	None
YES	NO	YES	YES [5/] or NO	Prepare funding request Execute mod	Approve CDD/CPD* [2/] or requirement Provide funding	None
YES	YES	NO	YES [5/] or NO	Revise APB [1/] Revise TEMP [2/] Execute mod	Approve CDD/CPD* [2/] or requirement Endorse APB [1/] Endorse TEMP [2/]	Approve APB [1/] Approve TEMP [2/]
YES	YES	YES	YES [5/] or NO	Prepare funding request Revise APB [1/] Revise TEMP [2/] Execute mod	Approve CDD/CPD* [2/] or requirement Provide funding Endorse APB [1/] Endorse TEMP [2/]	Approve APB [1/] Approve TEMP [2/]
NO	N/A	NO	NO	Execute mod	Approve requirement	None
NO	N/A	YES	NO	Prepare funding request Execute mod	Approve requirement Provide funding	None
NO	N/A	YES	YES	Prepare funding request Prepare APB [1/] Prepare TEMP [2/] Prepare ACAT [3/] desig request Execute mod	Approve CDD/CPD[2/] Provide funding Endorse APB [1/] Endorse TEMP [2/]	Approve APB [1/] Approve TEMP [2/] Approve ACAT [3/] desig request

1/ "Prepare APB" is for the original ongoing program if a "current APB" does not exist, or for the "modification only" if the modification is to be managed as a separate program. "Revise APB" is for the original ongoing program. See APB format in Consolidated Acquisition Reporting System (CARS) section of the Defense Acquisition Guidebook.
2/ If a new, or change to an existing, CDD/CPD or TEMP is required, see formats for CDD/CPD and TEMP in reference (c) and Defense Acquisition Guidebook, respectively.
3/ "Prepare ACAT designation request" is for the "modification only", unless the original program is still ongoing (i.e., in production), in which case the ACAT designation request shall encompass both the original program and the modification(s). See the ACAT designation request and ACAT designation change request content memorandum in the DON Acquisition and Capabilities Guidebook.
4/ $ threshold for "Abbreviated Acquisition Programs" is less than: for weapon system programs, $10M total development expenditure, $25M production or services expenditure in any fiscal year, and $50M total production or services expenditure for all fiscal years; for IT programs, $15M program costs in any single year and $30M total program costs.
5/ If answer to column 5 is YES*, an approved CDD/CPD or CDD/CPD revision is required.
6/ For IT programs, endorsement is provided by the IT functional area manager, approval is provided by the resource sponsor.
7/ For modifications that require additional funding, see ASN(RD&A) memorandum, “Shipbuilding Cost Growth - Configuration Control,” 4 Sep 01

2.6 Review of the Legality of Weapons Under International Law and Compliance with Arms Control Agreements

All potential weapons and weapons systems acquired or developed by DON shall be reviewed by the Judge Advocate General (JAG) of the Navy during the program decision process described in reference (r) to ensure that the intended use of such weapons or systems is consistent with domestic and international law. Also the Director, Strategic Systems Programs shall review those programs that are affected by Arms Control Agreements. PMs shall ensure that:

1. As required by reference (u), all activities of programs affected by Arms Control Agreements are reviewed for arms control compliance before such activity is undertaken; and

2. All potential weapons or weapon systems are reviewed by JAG before the award of the system development and demonstration contract and again before the award of the initial production contract. No weapon or weapon system may be acquired or fielded without a legal review.

The JAG shall maintain a permanent file of all opinions issued under this instruction. See reference (o), paragraph E1.14, for implementation requirements for DON programs.

Weapons or weapon systems for the purpose of the legal review of this paragraph are defined as all arms, munitions, materiel, instruments, mechanisms, devices, and those components required for their operation, that are intended to have an effect of injuring, damaging, destroying, or disabling personnel or property, to include non-lethal weapons. For purpose of the legal review of this paragraph, weapons do not include launch or delivery platforms, such as, but not limited to, ships or aircraft, but rather the weapons or weapon systems contained on those platforms.

2.7 Non-Acquisition Programs

The Research, Development, Test and Evaluation, Navy Appropriation Account funds both acquisition and non-acquisition programs. A non-acquisition program is an effort that does not directly result in the acquisition of a system or equipment for operational deployment and does not require an ICD. The requirement shall be included in a Sponsor's Program Plan (SPP) input to the Program Objective Memorandum and subsequent RDT&E budget item justification documentation.

Non-acquisition programs shall use current documentation required by the PPBES for management control.

OPNAV sponsors/CMC shall conduct annual requirements-based assessments of all non-acquisition programs, which are outside of the Future Naval Capability (FNC) review process. CNO (N6/N7)

and CMC shall provide ASN(RD&A) a listing annually of all ongoing non-acquisition programs. Non-acquisition programs that are FNC projects will be reviewed annually through the FNC process. In addition to the other criteria used to judge these efforts, consideration shall be given to the impact on interoperability and integration if these technologies are fielded and environmental assessments and reporting per enclosure (7).

2.8 Rapid Deployment Capability (RDC) Process and Procedures

The RDC process is a tailored approach for initiating and managing development of a capability for rapid deployment that may transition to an ACAT program.

2.8.1 Objectives of the RDC Process

RDC provides the ability to react immediately to a newly discovered enemy threat(s) or potential enemy threat(s) or to respond to significant and urgent safety situations through special, tailored procedures designed to:

1. Streamline the dialogue among the requirements community, the PPBES community, and the acquisition management community.

2. Expedite technical, programmatic, and financial decisions.

3. Expedite, within statutory limitations, the procurement and contracting processes.

4. Provide oversight of critical events and activities.

5. Ensure RDC units are interoperable and integratable with other systems as urgency permits.

2.8.2 Procedures for RDC Initiation and Planning

RDC efforts shall be initiated as follows:

1. A memorandum requesting initiation of an RDC effort shall be prepared by the program sponsor/requirements division, validated by CNO (N8)/CMC (Commanding General, Marine Corps Combat Development Command), and forwarded to ASN(RD&A) for approval. The memorandum shall contain the following:

   a. Brief description of the threat or urgency.

   b. Description of the requirement and whether it is a Service or joint requirement.

   c. A description of known products, domestic and foreign, that can provide the capability.

d. Quantities required.

e. Identification of funding (amount and source).

f. Required deployment date for RDC units.

g. Description of all testing.

h. Description and/or concept of logistics support required.

i. Description and/or concept of support required for long-term maintenance.

j. A statement that a plan will be developed for conducting a quick reaction assessment to verify that deployment of the RDC unit will not adversely affect interoperability and integration, compatibility, or safety.

k. Consideration of manpower, personnel, and training requirements for fielding the RDC.

2. ASN(RD&A) shall approve/disapprove the RDC request. If approved, ASN(RD&A) shall assign an RDC program designation identifier, and forward the RDC requirement to the appropriate PEO/SYSCOM/DRPM.

3. PEOs, SYSCOMs, and DRPMs shall develop and approve the following:

a. An overall RDC strategy and specific expediting measures.

b. A plan of action and milestones, which includes transition to an ACAT program, if appropriate.

c. A plan for logistics and long-term maintenance support including demilitarization and disposal.

d. A plan for PEO/SYSCOM/DRPM oversight.

e. A plan for testing to include interoperability, integration, safety, and quick reaction assessment per enclosure (5).

4. Copies of the approved RDC strategy and plans shall be forwarded to ASN(RD&A), the appropriate Deputy ASN(RD&A), ASN(RD&A) CHENG, and the program sponsor.

2.9 Executive Review Procedures

2.9.1 DON Program Decision Process

The only DON-level decision briefing shall be the program

decision meeting (PDM) (also referred to as a Navy Program Decision Meeting (NPDM)), as prescribed in reference (r). ACAT ID and IAM programs shall be reviewed by an ASN(RD&A)-chaired PDM prior to an Office of the Secretary of Defense (OSD)-level decision meeting. See reference (n), paragraph 3.10.2, for program decision implementation requirements for ACAT ID and IAM programs.

PEOs, SYSCOM Commanders, and DRPMs shall conduct an internal program review to prepare for the PDM for ACAT I, IA, and II programs, and shall issue schedules at least monthly for these reviews. Required meeting membership is per reference (r). Attendance is controlled by the PEO/SYSCOM/DRPM.

The Navy Review Board (NRB) shall be used, when necessary, to resolve major program issues at the Office of the Chief of Naval Operations (OPNAV) level prior to review at PDMs or special program reviews. NRB membership and procedures are contained in reference (j). The Ship Characteristics Improvement Panel (SCIP) and the Air Characteristics Improvement Panel (ACIP), as special panels of the NRB, shall provide coordination for ships and aircraft, related systems, and air launched weapons matters. SCIP/ACIP membership and procedures are contained in reference (d).

The cognizant PEO/SYSCOM Commander/DRPM, or designee, is responsible for ensuring ILS strategy, planning, risk, and execution are independently assessed prior to proceeding to Milestones B and C and the FRP DR. Assessments shall be conducted per reference (s) and the results reported to the MDA, DASN(L), cognizant system DASN, CNO (N4), program sponsor, and CMC (DC,I&L)/MARCORSYSCOM for cognizant programs. All programmatic aspects that affect logistics support planning, budgeting, execution, and established long-term readiness/supportability metrics shall be assessed. Results of an independent assessment shall be the basis for logistics certification for Milestones B and C and FRP DR. Programs where the MDA is not the Navy or Marine Corps (e.g., ACAT ID or a joint program where a Service other then DON is the lead), the DON Component Acquisition Executive (ASN(RD&A)) for ACAT I and II programs, or PEO/SYSCOM Commander/DRPM for ACAT III and IV programs, shall require completion of an independent logistics assessment (ILA) and obtain certification of the results prior to review by the MDA. Each PEO, SYSCOM Commander, and DRPM shall assess logistics readiness for initial operational capability (IOC) and full operational capability (FOC) in conjunction with the customer per references (s) and (e). Using the criteria provided in reference (s), the PEO/SYSCOM Commander/DRPM shall certify to the MDA the adequacy of their ACAT program’s ILS planning, management, resources, and execution.

For ship/system alterations, the cognizant program manager/claimant stakeholder is responsible for ensuring that the Fleet Modernization Program (FMP) decision requirements have been

satisfied, concurrence has been received for readiness to proceed, and for reporting the results to the cognizant MDA. The FMP process shall provide Fleet and OPNAV sponsor-validated requirements and the resource commitment for continued alteration development.

2.9.2 IT Acquisition Board (ITAB) Reviews

ACAT IAM programs are governed by reference (n), paragraph 3.10.3, for MAIS decision meetings. DON ACAT IAM programs follow the PDM procedures of reference (r), prior to proceeding to an ITAB Review.

2.9.3 Defense Space Acquisition Board (DSAB) Reviews

The Under Secretary of the Air Force (USecAF) is the DoD Space MDA for all DoD Space MDAPs (ACAT I programs). This authority has been delegated by the Defense Acquisition Executive, through the Secretary of the Air Force. The responsibility for the execution of DOD Space systems flows from the DoD Space MDA through each CAE to the appropriate PEO and PM. Reference (v) provides the necessary guidance and procedures for these programs.

2.10 Source Selection Authority (SSA)

The SSA policies below apply to competitively negotiated acquisitions covering the selection of one or more prime development and/or production contractors (including concept exploration or the initiation of preliminary, contract, or detailed design for ship development/acquisition programs). These SSA policies also apply to other competitively negotiated acquisitions approved in advance by the assigned PEO, SYSCOM Commander, or DRPM; or the head of the contracting activity.

2.10.1 ACAT I, IA, and II Programs

ASN(RD&A) for assigned ACAT IA programs, and PEOs, SYSCOM Commanders, and DRPMs for their assigned ACAT I, IA, and II programs, shall be the SSA, unless otherwise specified by the USD(AT&L), ASD(NII) for ACAT IA programs, the Secretary of the Navy, or ASN(RD&A). The ACAT I SSA responsibility may not be further delegated. The ACAT IA SSA responsibility may be delegated. The ACAT II SSA responsibility may be delegated to an individual who:

1. If a member of the armed forces, is a flag or general officer; or

2. If a civilian, is a member of the SES (or in a comparable or higher position under another schedule).

2.10.2 ACAT III, IV, and Abbreviated Acquisition Programs

PEOs, SYSCOM Commanders, and DRPMs for their assigned ACAT III, IV, and abbreviated acquisition programs, and ASN(RD&A) or designee for information technology (IT) ACAT III, IVT, and abbreviated acquisition programs not assigned to PEOs, SYSCOM Commanders, and DRPMs, shall designate the SSA at the time approval is granted to use formal source selection procedures.

2.10.3 Other Competitively Negotiated Acquisitions

The SSA for such other competitively negotiated acquisitions shall be as prescribed by the Federal Acquisition Regulations (FAR), the Defense FAR Supplement, or the Navy-Marine Corps Acquisition Regulation Supplement, unless otherwise directed by ASN(RD&A).

Chapter 3
Statutory, Regulatory, and Contract Reporting Information and Milestone Requirements

References:
(a) DoD Directive 5000.1, "The Defense Acquisition System," 12 May 03 (NOTAL)
(b) DoD Instruction 5000.2, "Operation of the Defense Acquisition System," 12 May 03 (NOTAL)
(c) Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01D, "Joint Capabilities Integration and Development System," 12 Mar 04 (NOTAL)
(d) Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3170.01A, "Operation of the Joint Capabilities Integration and Development System," 12 Mar 04 (NOTAL)
(e) USD(P&R) memorandum, "Interim Policy and Procedures for Strategic Manpower Planning and Development of Manpower Estimates," 10 Dec 03 (NOTAL)
(f) SECNAVINST 4105.1A, "Independent Logistics Assessment (ILA) and Certification Requirements," 5 Mar 04 (NOTAL)
(g) SECNAVINST 5000.36, "Department of the Navy Data Management and Interoperability," 1 Nov 01 (NOTAL)
(h) DoD 4140.1-R, "DoD Supply Chain Material Management Regulation," 23 May 03 (NOTAL)
(i) Public Law 108-136, "National Defense Authorization Act for Fiscal Year 2004, Section 802, Quality Control In Procurement Of Aviation Critical Safety Items And Related Services," 24 Nov 03 (NOTAL)
(j) SECNAVINST 5100.10H, "Department of the Navy Policy for Safety, Mishap Prevention, Occupational Health and Fire Prevention Programs," 15 Jun 99 (NOTAL)
(k) OPNAVINST 8026.2A, "Navy Munitions Disposition Policy," 15 Jun 00 (NOTAL)
(l) DoD Directive 5200.39, "Security, Intelligence, and Counterintelligence Support to Acquisition Program Protection," 10 Sep 97 (NOTAL)
(m) SECNAVINST 3501.1, "Department of the Navy (DON) Critical Infrastructure Protection (CIP)," 16 Jun 02 (NOTAL)
(n) OPNAVINST 3811.1C, "Threat Support to Weapon System Planning and Acquisition," 16 May 95 (NOTAL)
(o) OPNAVINST 2450.2, "Electromagnetic Compatibility Program Within the Department of the Navy," 8 Jan 90 (NOTAL)
(p) MCO 2410.2B, "Electromagnetic Environmental Effects (E3) Control Program," 12 Mar 97 (NOTAL)

(q) DoD 5200.1-M, "Acquisition Systems Protection Program," 16 Mar 94 (NOTAL)
(r) OPNAVINST 3432.1. "Operations Security," 29 Aug 95 (NOTAL)
(s) OPNAVINST 1500.76, "Navy Training System Requirements, Acquisitions, and Management," 21 Jul 98 (NOTAL)
(t) USD(A&T) Memorandum, "Collection of Past Performance Information in the Department of Defense," 20 Nov 97 (NOTAL)
(u) Federal Acquisition Regulation (FAR), Part 15, "Contracting by Negotiation," (NOTAL)
(v) Federal Acquisition Regulation (FAR), Part 19, "Small Business Programs," (NOTAL)
(w) Federal Acquisition Regulation (FAR), Part 42, "Contract Administration and Audit Services," (NOTAL)
(x) Defense Federal Acquisition Regulation Supplement (DFARS), Part 236, "Construction and Architect-Engineer Contracts," (NOTAL)
(y) Department of the Navy Guide, "Contractor Performance Assessment Reporting System (CPARS)," Jan 00 (NOTAL)

3.1 Program Information

See Tables E3T1 (statutory), E3T2 (regulatory), and E3T3 (contract reporting) for acquisition category (ACAT) program and contract reporting information and milestone requirements. The format for reporting information is at the discretion of the milestone decision authority (MDA), except as indicated in the following three tables and references (a) through (d). Program Manager (PM)-prepared reporting information and milestone requirements may be tailored and combined when approved by the MDA.

The designation ACAT I, when used in Tables E3T1, E3T2, and E3T3, signifies both ACAT ID and IC programs. Similarly, the designation ACAT IA, when used in Tables E3T1, E3T2, and E3T3, signifies both ACAT IAM and IAC programs. The designation ACAT IV, when used in Tables E3T1, E3T2, and E3T3, signifies both ACAT IVT and IVM programs. The source of the statutory, regulatory, and contract reporting requirement for each entry (arranged in alphabetical order) in Tables E3T1, E3T2, and E3T3, can be found in references (a) and (b), or this instruction. The Assistant Secretary of the Navy (Research, Development and Acquisition) (ASN(RD&A)) is the Component Acquisition Executive (CAE) in Tables E3T1 and E3T2.

Acquisition documentation for ACAT I and II programs requiring coordination with the Office of the Chief of Naval Operations (OPNAV), Headquarters Marine Corps (HQMC), and the Offices of the Assistant Secretaries of the Navy shall be distributed concurrently to all applicable offices. Individual signature sheets will be collated by the Office of ASN(RD&A). Concurrence will be assumed after 30 calendar days unless a specific non-concurrence has been forwarded to ASN(RD&A).

Table E3T1 STATUTORY INFORMATION AND MILESTONE REQUIREMENTS					
Program Information and Reports	**Presentation Medium**	**ACAT**	**Applicability ****	**Prepared By**	**Approved By**
OSD PREPARED					
Beyond-LRIP Report [1/]	Optional	**I, IA + OSD T&E oversight pgms designated by DOT&E**	Full-Rate Production Decision Review (FRP DR)	DOT&E	DOT&E
Electronic Warfare (EW) T&E Report Report Control Symbol (RCS) DD-AT&L(A)2137 *	Optional	**EW pgms on OSD T&E oversight**	Annually	Dir Def Systems DOT&E	Dir Def Systems DOT&E
Independent Cost Estimate *	MDA option	**I**	Pgm Initiation for Ships (cost assessment only pre-MS B for ships) MS B/C FRP DR	CAIG/NCAD [2/]	CAIG/NCAD [2/]
LFT&E Report * [3/] RCS: DD-OT&E(AR)1845	Optional	**LFT&E programs**	FRP DR	DOT&E	DOT&E via SECDEF
COMPONENT PREPARED					
Acquisition Program Baseline *	See DAG	**I**	Pgm Initiation for Ships MS B/C (updated as nec) FRP DR	PM	MDA
Analysis of Alternatives (AoA)	Optional	**IA**	MS A MS B/FRP DR (or equiv)	Indep Activity	CAE/CNO/CMC
Benefit Analysis and Determination (applicable to bundled acquisitions)	Acqn Strat	**I, IA, II, III, IV**	MS B MS C (if no MS B)	PM	MDA
Certification of compliance with the Financial Management Enterprise Architecture	Acqn Strat	**IA (Financial Mngt MAIS only)**	MS A/B MS C (if FRP equivalent) FRP DR	PM	MDA
Clinger-Cohen Act (CCA) Compliance (all IT - including NSS)	See DoDI 5000.2, Encl 4, Table E4T1	**I, IA, II, III, IV**	MS A Pgm Initiation for Ships MS B MS C FRP DR or equivalent	PM (coordinated with DASN(Space & C4I) for ACAT I/IA/II)	DOD CIO (ACAT IA) DON CIO (ACAT I/IA/II) Cmd IO (ACAT III/IV)
Competition Analysis * (Depot-level Maintenance $3M rule)	Acqn Strat	**I, II, III, IV**	MS B MS C (if no MS B)	PM	MDA
Consideration of Technology Issues	TDS (MS A) Acqn Strat	**I, IA, II, III, IV**	MS A/B/C	PM	MDA
Cooperative Opportunities *	Acqn Strat	**I, II, III, IV**	MS B/C	PM	MDA
Core Logistics Analysis/ Source of Repair Analysis *	Acqn Strat	**I, II, III, IV**	MS B MS C (if no MS B)	PM	MDA
Economic Analysis (EA)	Optional	**IA**	MS A (may be combined with AoA) MS B/FRP DR (or equiv)	PM	PM
Industrial Capabilities *	Acqn Strat	**I, II, III, IV**	MS B/C	PM	MDA
Information Assurance Strategy (all IT - including NSS)	DON CIO Template, see Encl (4), para 4.4	**I, IA, II, III, IV**	MS A Pgm Initiation for Ships MS B MS C FRP DR or equivalent	PM	DON CIO (ACAT I/IA/II) Cmd IO (ACAT III/IV)
LFT&E Waiver and Alternate LFT&E plan * [3/]	MDA option	**LFT&E programs**	MS B	PM	USD(AT&L) (ACAT ID) CAE (ACAT IC/II/III/IV) DOT&E
LRIP Quantities *	ADM	**I, II, III, IV**	MS B	PM	MDA
Manpower Estimate * (reviewed by OUSD(P&R))	See ref (e) sample format	**I**	MS B/C FRP DR	CNO/CMC	CNO/CMC
Market Research	Acqn Strat	**I, IA, II, III, IV**	MS A/B	PM	MDA
Operational Test Plan *	OTA option	**I + DOT&E oversight pgms**	Prior to start of OT&E	OTA	DOT&E

* Not statutorily required for ACAT IA programs. DAG is the Defense Acquisition Guidebook.
** Information required at FRP DR is required at MS III for ongoing programs that were post-Milestone II as of the issuing of 23 Oct 00 version of DoDI 5000.2.
1/ Statutory for ACAT I programs and those ACAT II, III, and IV pgms designated for OSD Test & Evaluation oversight.
2/ Naval Cost Analysis Division (NCAD) in ASN(FM&C) is responsible when independent cost estimate (ICE) is not prepared by CAIG.
3/ Statutory for LFT&E programs and product improvements thereto.

Table E3T1 STATUTORY INFORMATION AND MILESTONE REQUIREMENTS (cont'd)					
Program Information and Reports	**Presentation Medium**	**ACAT**	**Applicability ****	**Prepared By**	**Approved By**
COMPONENT PREPARED (cont'd)					
Post-Deployment Performance Review	MDA option	**I, IA**	FRP DR (submit plan) IOC + 1 yr (assessment) 3 yr intervals (repeat) or as determined by MDA	PM	MDA
Program Deviation Report *	PM option	**I**	Immediately upon a program deviation	PM	PM
Programmatic Environmental, Safety, & Health Evaluation (PESHE) (including NEPA Compliance Schedule)	MDA option, Summary in Acqn Strat	**I, IA, II, III, IV**	Pgm Initiation for Ships MS B/C FRP DR	PM	PM (PESHE) MDA (Acqn Strat)
Registration of mission-critical and mission-essential information systems RCS: DD-C3I(AR)2096	See DAG	**I, IA, II, III, IV (all MC or ME IT systems - including NSS)**	Program Initiation (after initial registration, update quarterly)	PM	PM
Selected Acquisition Report (SAR) - * RCS: DD-AT&L(Q&A)823	See DAG	**I**	Pgm Initiation for Ships MS B, annually thereafter End of quarter following: MS C FRP DR Breach	PM	CAE/PEO/SYSCOM USD(AT&L)
Spectrum Certification Compliance (applicable to all systems/equipment that require use of the electromagnetic spectrum)	DD Form 1494	**I, IA, II, III, IV**	MS B MS C (if no MS B)	PM	USN - CNO (N6) USMC - HQMC (C4)
Technology Development Strategy (TDS)	MDA option	**potential I, IA** **I, IA**	MS A MS B/C	PM	MDA
Unit Cost Report- * RCS: DD-AT&L(Q&R)1591	See DAG	**I**	Quarterly	PM	CAE/PEO/SYSCOM USD(AT&L)

Table E3T2 REGULATORY INFORMATION AND MILESTONE REQUIREMENTS					
Program Information and Reports	**Presentation Medium**	**ACAT**	**Applicability ****	**Prepared By**	**Approved By**
OSD/JOINT STAFF.DISA PREPARED					
Acquisition Decision Memorandum	MDA option	**ID, IAM**	Pgm Initiation for Ships MS A/B/C, Each Review	MDA staff	MDA
C4I Supportability Certification	Optional	**I, IA, II, III, IV**	FRP DR	Joint Staff	Joint Staff (J-6)
Independent Technology (Readiness) Assessment	Optional	**ID (if required by DUSD(S&T))**	MS B/C	DUSD(S&T), or designee	DUSD(S&T)
Interoperability Certification	Optional	**I, IA, II, III, IV**	FRP DR	DISA	Joint Staff (J-6)
COMPONENT PREPARED					
Acquisition Decision Memorandum	MDA option	**IC, IAC** **II, III, IV**	Pgm Initiation for Ships MS A/B/C, Each Review	MDA staff	MDA
Acquisition Program Baseline	See DAG	**IA, II, III, IV**	Pgm Initiation for Ships MS B/C (updated as nec) FRP DR	PM	MDA
Acquisition Strategy	MDA option	**I, IA, II, III, IV**	Pgm Initiation for Ships MS B/C, and FRP DR	PM	MDA
Affordability Assessment	Optional	**I, IA, II, III, IV**	Pgm Initiation for Ships MS B/C	CNO/CMC	CNO/CMC
Analysis of Alternatives Plan [4/]	Optional	**I, IA, II, III, IV**	Concept Decision	Indep Activity	CAE/MDA/CNO/CMC
Analysis of Alternatives (AoA) [4/]	Optional	**I, II, III, IV**	MDAPs/non-MDAPs Pgm Initiation for Ships MS A/B MS C (updated as nec) non-MAISs MS A MS B/FRP DR (or equiv)	Indep Activity	CAE/MDA/CNO/CMC

* Not statutorily required for ACAT IA programs. DAG is the Defense Acquisition Guidebook.
** Information required at FRP DR is required at MS III for ongoing programs begun prior to the 23 Oct 00 version of DoDI 5000.2 that are post-Milestone II.
4/ CAE, or designee, co-approves ACAT ID/IAM and MDA, or designee, co-approves ACAT IC/IAC and below Analysis of Alternatives (AoA) Plan and AoA.

Table E3T2 REGULATORY INFORMATION AND MILESTONE REQUIREMENTS (cont'd)					
Program Information and Reports	**Presentation Medium**	**ACAT**	**Applicability ****	**Prepared By**	**Approved By**
COMPONENT PREPARED (cont'd)					
C4I/Information Support Plan [5/] (also summarized in acquisition strategy)	See DAG	**I, IA, II, III, IV**	Pgm Initiation for Ships MS B/C	PM	PEO/SYSCOM/DRPM, or designee
Component Cost Analysis	Optional	**IA** **I (CAE option)**	MDAPs (CAE option) Pgm Initiation for Ships MS B/FRP DR MAISs (to support EA) MS A/B/FRP DR	NCAD	NCAD
Component LFT&E Report	Optional	**LFT&E programs**	Completion of LFT&E	DT&E Activity	DT&E Activity
Cooperative Opportunities	Acqn Strat	**IA**	MS B/C	PM	MDA
Cost Analysis Requirements Description [6/]	Optional see DoDI 5000.2, Encl 6	**I** **IA (when an EA is required)**	Pgm Initiation for Ships MS A (MAIS only) MS B/FRP DR MS C (MDAP only)	PM (coordinated with OSD CAIG (ACAT ID) and NCAD (ACAT IC/IA))	PEO/SYSCOM/DRPM
Defense Acquisition Executive Summary (DAES), RCS: DD-AT&L(Q)1429	See DAG	**I, IA**	Quarterly Upon POM or BES submission Upon unit cost breach	PM	PM
DT&E Report	Optional	**I, selected IAM, + DOT&E pgms**	MS B/C and FRP DR	DT&E Activity	DT&E Activity
Earned Value Management Systems (EVMSs)	See DAG, OMB Circular A-11, Part 7	**I, IA, II, III, IV**	Implement EVMS guidelines in ANSI/EIA-748-1998 and conduct Integrated Baseline Reviews (IBRs) (applies to contracts/agreements for RDT&E over $73 million and procurement/O&M over $315 million, both in FY 2000 constant dollars)	Contractor implements EVMS PM conducts IBRs	PM
Exit Criteria	ADM	**I, IA, II, III, IV**	Pgm Initiation for Ships MS A/B/C Each Review	PM	MDA
Independent Cost Estimate/Assessment	MDA option	**II**	MS B/C FRP DR	SYSCOM/PEO Cost Estimating Office	SYSCOM/PEO Cost Estimating Office
Independent Logistics Assessment (ILA) and Logistics Certification	See ref (f)	**I, IA, II, III, IV**	MS B/C FRP DR	ILA team leader	ILA (ILA team leader) Logistics Certification (PEO/SYSCOM/DRPM)
Initial Capabilities Document (ICD) [7/] Capability Development Document (CDD) Capability Production Document (CPD)	See CJCSM 3170 series	**I, IA, II, III, IV**	Concept Decision (ICD) MS A/B/C (if init) (ICD) Pgm Init - Ships (CDD) [7/] MS B (CDD) [7/] MS C (CPD) [7/]	Program Sponsor	JROC (JROC Interest) CNO/CMC (Joint Integration and Independent)
Manpower Estimate [8/]	See ref (e) sample format	**IA, II, III, IV**	MS B/C FRP DR	CNO/CMC	CNO/CMC
Operational Test Agency Report of OT&E Results	Optional	**I, IA, II, III, IVT**	MS B/C FRP DR	OPTEVFOR MCOTEA	OPTEVFOR MCOTEA

DAG is the Defense Acquisition Guidebook

** Information required at FRP DR is required at MS III for ongoing programs begun prior to the 23 Oct 00 version of DoDI 5000.2 that are post-Milestone II.

5/ C4I Support Plan (now called the Information Support Plan per CJCSI 6212.01C) is only required for those programs that interconnect to the communications and information infrastructure; this includes IT systems, including National Security Systems.

6/ A Cost Analysis Requirements Description (CARD) shall be prepared prior to: the Independent Cost Estimate for ACAT I programs, the Program Life-Cycle Cost Estimate for ACAT I and IA (that require an EA) programs, and the Independent Cost Assessment for ACAT I Program Initiation for Ships pre-Milestone B.

7/ A system of systems ICD may satisfy ICD requirement for Concept Decision for potential ACAT II, III, and IV programs. Approved Operational Requirements Documents (ORDs) may support Program Initiation for Ships and Milestones B and C until 24 Jun 05 per CJCSI 3170.01D.

8/ Manpower estimates shall be developed for all manpower significant programs regardless of ACAT at the request of the Component Manpower Authority (e.g., programs with high personnel or critical skill requirements).

Table E3T2 REGULATORY INFORMATION AND MILESTONE REQUIREMENTS (cont'd)					
Program Information and Reports	**Presentation Medium**	**ACAT**	**Applicability ****	**Prepared By**	**Approved By**
COMPONENT PREPARED (cont'd)					
Operational Test Plan	OTA option	**IA + DOT&E oversight pgms**	Prior to start of OT&E	OTA	DOT&E
Program Deviation Report	PM option	**IA, II, III, IV**	Immediately upon a program deviation	PM	PM
Program Life-Cycle Cost Estimate	MDA option	**I, IA, II, III, IV**	Pgm Initiation for Ships MS B/C, and FRP DR	PM	PM
Program Protection Plan (for programs with critical program information) (includes Anti-Tamper Annex) (also summarized in acquisition strategy)	Optional	**I, IA, II, III, IV**	MS B (based on approved requirements in CDD) MS C	PM (Annex requires CHENG's technical concurrence)	PM
Risk Assessment	Acqn Strat	**I, IA, II, III, IV**	Pgm Initiation for Ships MS A/B/C, and FRP DR	PM	MDA
Systems Engineering Plan	Optional	**I, IA, II, III, IV**	Pgm Initiation for Ships MS A/B/C	PM	MDA
System Threat Assessment (Information technology programs use published Capstone Information Operations System Threat Assessment)	Optional	**I, IA, II, III, IV**	Pgm Initiation for Ships MS B/C	Intell Activity (ONI or MCIA)	Intell Activity (ONI or MCIA) DIA validates ACAT ID
Technology Readiness Assessment	Optional	**I, IA, II, III, IV**	Pgm Initiation for Ships (preliminary assessment pre-MS B for ships) MS B/C	PM	CNR (ACAT I/IA/II) PEO/SYSCOM (ACAT III/IV)
Test and Evaluation Master Plan [9/]	see DAG	**I, IA, II, III, IV**	MS A (test and evaluation strategy only) MS B MS C (update, if nec) FRP DR	PM OPTEVFOR MCOTEA	CNO/CMC [9/] CAE/MDA DOT&E/Cognizant OIPT Leader
Training System Plan	see footnote [10/]	**I, IA, II, III, IV**	MS B (preliminary) Phase B midpoint (final) MS C (update, if nec)	PM	CNO/CMC

DAG is the Defense Acquisition Guidebook.

** Information required at FRP DR is required at MS III for ongoing programs begun prior to the 23 Oct 00 version of DoDI 5000.2 that are post-Milestone II.

9/ TEMPs may be tailored as appropriate for ACAT IVM programs; CNO/CMC, or designee, signature required on TEMPs for ACAT I, IA, II, and III programs only. CAE and CNO (N091)/ACMC approve TEMPs for DON for ACAT I, IA, and II programs. MDA and CNO (N091)/ACMC approve TEMPs for DON for ACAT III programs. MDA approves TEMPs for DON for ACAT IV programs. DOT&E and cognizant OIPT Leader approve TEMPs for programs on the OSD T&E Oversight List.

10/ Mandatory format for the Navy Training System Plan is in OPNAVINST 1500.76. The format for the Marine Corps Training System Plan is optional.

Table E3T3 CONTRACT REPORTING INFORMATION REQUIREMENTS					
Program Information and Reports	**Presentation Medium**	**ACAT**	**Applicability**	**Prepared By**	**Submitted To**
COMPONENT PREPARED					
Contractor Cost Data Report (CCDR)	CAIG format	**I (CAIG may waive)** **II, III, IV (Discretionary)**	•All contracts and subcontracts valued at more than $50 million (in FY 2002 constant dollars), regardless of contract type, for ACAT I programs, unless waived. Discretionary for ACAT II, III, and IV programs using the criteria in this column. •Not required for contracts priced below $7 million (in FY 2002 constant dollars) •The CCDR requirement on high-risk or high-technical-interest contracts priced between $7 and $50 million is left to the discretion of the Cost Working Integrated Product Team (WIPT) •Not required for procurement of commercial systems, or for non-commercial systems bought under competitively awarded, firm fixed-price contracts, as long as competitive conditions continue to exist.	Contractor	PM OSD's Defense Cost and Resource Center (DCRC) for all ACATs
Software Resources Data Report (SRDR)	CAIG format	**I, IA (CAIG may waive)** **II, III, IV (Discretionary)**	All contracts and subcontracts valued at more than $50 million (FY 2002 constant dollars), regardless of contract type, for contractors developing/ producing elements within ACAT I and IA programs for any software development element with a projected software effort greater than $25 million (FY 2002 constant dollars). Submit data on each software element at the following times: - 180 days prior to contract award - 60 days after contract award - 60 days after start of subsequent software release - within 120 days after software release or final delivery	PM (pre-contract award format coordination with CAIG and estimated cost of development and production of each software element) Contractor (post-contract award report of the cost of development and production of each software element)	DCRC for all ACATs PM DCRC for all ACATs

3.2 Exit Criteria

For each acquisition phase, established exit criteria shall be met and demonstrated prior to entrance into the next phase. Reference (b), enclosure 3, requires MDAs to establish exit criteria in acquisition decision memorandums (ADMs) for all ACAT programs. Exit criteria shall not be part of an acquisition program baseline.

3.3 Technology Maturity

PMs, with support from the Office of Naval Research or Program Executive Officer (PEO)/Systems Command (SYSCOM) Science and Technology (S&T) office, shall conduct technology readiness assessments (TRAs) for their programs. TRAs shall be approved by the Chief of Naval Research (CNR) or the respective PEO/SYSCOM Commander, or designee, as indicated in the following paragraphs. The TRA shall be submitted for approval prior to Milestones B and C. A preliminary TRA shall be conducted for ship programs that have program initiation at Milestone A.

For ACAT ID and IAM programs, the DON S&T Executive is the CNR who shall approve the TRA. CNR submits the TRA to the Deputy Under Secretary of Defense (DUSD) (S&T) via the Assistant Secretary of the Navy (Research, Development and Acquisition) (ASN(RD&A)). The CNR shall submit the TRA to ASN(RD&A) after discussion with the respective PEO, SYSCOM Commander, or Direct Reporting Program Manager (DRPM) and PM. DUSD(S&T) may conduct an independent TRA for ACAT ID programs.

For ACAT IC, IAC, and II programs, the CNR shall approve the TRA. The CNR shall submit the TRA to ASN(RD&A) after discussion with the respective PEO, SYSCOM Commander, or DRPM and PM.

For ACAT III and IV programs, the PEO, SYSCOM Commander, or designee, or DRPM shall approve the TRA.

See reference (b), paragraphs 3.4 and 3.7.2.2, for implementation requirements for all DON ACAT programs.

3.4 Acquisition Strategy

3.4.1 General Considerations for an Acquisition Strategy

PMs for all Department of the Navy (DON) ACAT programs shall develop an acquisition strategy (AS) implementing a total systems engineering approach per references (a) and (b). For ACAT IC, IAC, and II programs, the PM shall develop the acquisition strategy in coordination with the acquisition coordination team (ACT). The ACT is described in enclosure (2), paragraph 2.3.2. The MDA shall approve the acquisition strategy prior to the release of the formal solicitation.

3.4.2 Requirements/Capability Needs

User requirements/capabilities needs for an acquisition shall be briefly synopsized in an acquisition strategy and are described in enclosure (2), paragraph 2.1.

3.4.3 Program Structure

Each acquisition strategy shall include a program structure, the purpose of which is to identify in a top-level schedule the major program elements such as program decision points, acquisition phases, test phases, contract awards, and delivery phases.

3.4.4 Risk

Plans for assessing and mitigating program risk shall be summarized in the acquisition strategy. A risk assessment identifying all technical, cost, schedule, and performance risks and plans for mitigating those risks shall be conducted prior to each milestone decision and the Full-Rate Production Decision Review (FRP DR). PMs for all DON programs shall, for the purpose of reducing or mitigating program risk, research and apply applicable technical and management lessons-learned during system development, procurement, and modification.

3.4.4.1 Interoperability and Integration Risk

For programs that are part of a system of systems (SoS) or family of systems (FoS), the risk management strategy shall specifically address integration and interoperability as a risk area. The PM shall make use of Navy technical databases for Fleet integration and interoperability issues and assigned risks. The risk assessment for such programs that are part of a SoS or FoS shall include the following:

1. Identification of interoperability and integration risks and actions needed for sufficient mitigation.

2. Assessment of the risk in the program's ability to meet its interoperability KPP threshold.

Risk assessments for ACAT I, IA, and II programs and applicable ACAT III and IV programs that are designated by ASN(RD&A) for integration and interoperability special interest shall be submitted to ASN(RD&A) Chief Engineer (CHENG) no later than 30 calendar days prior to program decision briefings. ASN(RD&A) CHENG shall advise ASN(RD&A) and the PM of the adequacy of the integration and interoperability risk assessment and risk mitigation plan.

3.4.5 Program Management

The acquisition strategy shall be developed in sufficient

detail to establish the managerial approach that shall be used to achieve program goals. PMs who have or use government property in the possession of contractors (GPPC) shall have a process in place to ensure the continued management emphasis on reducing GPPC and prevent any unnecessary additions of GPPC.

3.4.6 Design Considerations Affecting the Acquisition Strategy

3.4.6.1 Open Systems Approach

Open systems approach shall be applied as an integrated technical approach and is intended to be used for all systems, including support systems.

3.4.6.2 Interoperability

For programs that are part of a SoS or FoS, interoperability and integration shall be a major consideration during all program phases. All programs shall implement data management and interoperability processes, procedures, and tools, per reference (g), as the foundation for information interoperability.

3.4.6.3 Aviation Critical Safety Items

The Naval Air Systems Command is designated the aviation design control activity as required by references (h) and (i). As such, it is responsible for establishing processes to identify and manage the procurement, repair, modification, and overhaul of aviation critical safety items (CSIs).

Program managers of aviation or ship-air integration systems shall ensure that design, contracting, and support strategies address the proper and timely identification, technical documentation, marking or serializing and tracking, procurement, support, and disposal of aviation CSIs per references (h) and (i). Logistics support organizations shall ensure that aviation CSIs are properly catalogued and that approved sources of supply are identified by the design control activity. Contracting activities shall only award contracts for the procurement of aviation CSIs or for the modification, repair, or overhaul of aviation CSIs to sources approved by the design control activity. Furthermore, all aviation CSIs or modifications/repair/ overhaul services shall meet all technical and quality requirements specified by the design control activity.

3.4.6.4 Information Assurance

Information assurance requirements shall be identified and included in the design, acquisition, installation, operation, upgrade, and replacement of all DON information systems per 10 USC 2224, Office of Management and Budget Circular A-130, and

reference (b). PMs shall summarize the information assurance strategy in the acquisition strategy.

3.4.6.5 Standardization and Commonality

Common systems can provide efficiencies that include inherently greater interoperability, lower total ownership costs, consistent and integrated roadmaps for system evolution, and planned dual-use functions. Acquisition strategies shall identify common systems integrated into the acquisition program.

3.4.7 Support Strategy

Support planning shall show a balance between program resources and schedule so that systems are acquired, designed, and introduced efficiently to meet CDD/CPD and APB performance design criteria thresholds. The PM as the life-cycle manager, designated under the tenets of Total Life Cycle Systems Management (TLCSM), shall document the product support strategy in the acquisition strategy. Performance Based Logistics (PBL) is the preferred support strategy and method of providing weapon system logistics support. A comprehensive business case analysis will be the basis for selecting a support strategy and reflect the associated tradeoffs (e.g., between performance, technical, business, organic/commercial considerations). A program level PBL implementation plan shall be developed for all programs using a PBL support strategy.

3.4.7.1 Human Systems Integration (HSI)

The AS shall summarize HSI planning. It shall describe how the system will meet the needs of the human operators, maintainers, and support personnel. This includes manpower, personnel, and training (MPT), human factors engineering, personnel survivability, and habitability. The AS describes how the program will meet HSI programmatic requirements and standards.

3.4.7.2 Environmental, Safety, and Occupational Health (ESOH) Considerations

Reference (j) provides procedures for a system safety program that will identify all environmental, safety, and occupational health hazards and provide means to either remove hazards or reduce risk to a cost effective risk level.

The acquisition strategy shall incorporate a summary of the programmatic ESOH evaluation (PESHE), including ESOH risks and proposed mitigation plans, a strategy for integrating ESOH considerations in the systems engineering process, identification of ESOH responsibilities, a method for tracking progress, and a schedule for National Environmental Policy Act (NEPA) (42 USC 4321-4370d and Executive Order 12114) compliance. See enclosure (3), Table E3T1, and enclosure (7), paragraph 7.3.

3.4.7.3 Demilitarization and Disposal Planning

PMs shall plan for recovery for end of life-cycle demilitarization and disposal per reference (k).

3.4.7.4 Post Deployment Performance Review

A post deployment performance review shall be established for ACAT I and IA programs.

3.4.7.5 Program Protection Planning

Program protection plans for programs with critical program information shall address the minimum requirements in reference (b), paragraph 3.4.2, prior to Milestone B. Reference (l) provides specific guidance on program protection planning.

Critical infrastructure protection (CIP) should be addressed throughout the acquisition phases through vulnerability assessments per reference (m) at milestone decision points for any infrastructure items, public or private, deemed to be critical to the production or sustainment of weapon systems deemed critical to DON force and materiel readiness and operations in peacetime, crisis, and wartime.

3.4.8 Business Strategy

3.4.8.1 International Cooperation*

PMs for DON ACAT programs shall consult with the Navy International Programs Office during development of the international element of the program's acquisition strategy to obtain:

1. Relevant international programs information.

2. ASN(RD&A) policy and procedures regarding development, review, and approval of international armaments cooperation programs.

3. DON technology transfer policy.

See the Defense Acquisition Guidebook for implementation guidance for all DON ACAT programs.

*Not normally applicable to IT programs.

3.4.8.1.1 International Cooperative Strategy

DON PMs and/or PEOs considering international cooperation should consult with the Navy International Programs Office to develop a strategy.

The acquisition strategy shall discuss the potential for increasing, enhancing, and improving our conventional forces and those of our allies, including reciprocal defense trade and cooperation, and international cooperative research, development, production, and logistics support. The acquisition strategy shall also consider the possible sale of military equipment.

The strategy should also consider security, information release, technology transfer issues, bilateral versus multilateral cooperation, harmonization of military requirements, and potential involvement of foreign industry and/or technology in the DON program.

3.4.8.1.2 International Interoperability

PEOs and/or PMs should be cognizant of the potential interoperability benefits resulting from international cooperation and sales to international partners.

The use of same or similar equipment, systems, or protocols resulting from cooperative development, production, or support of weapons systems contributes to overarching interoperability and coalition warfare goals with allies and friendly foreign nations, and should be a key factor when considering the merits of entering into an international cooperative relationship.

3.5 Intelligence Support*

Life-cycle threat assessment and intelligence support for ACAT I, II, III, and IV programs shall be provided by the Office of Naval Intelligence (ONI) per reference (n) or by the Marine Corps Intelligence Activity.

*Normally not applicable to IT programs.

3.6 Command, Control, Communications, Computers, and Intelligence (C4I) Support

PMs shall develop Information Support Plans (ISPs) (formerly the C4I Support Plans (C4ISPs)) for those ACAT programs that connect in any way to the communications and information infrastructure. ISPs are to be developed per the requirements in reference (b).

Appropriate Deputy Assistant Secretaries of the Navy (DASNs(RD&A)), in conjunction with ASN(RD&A) CHENG, and the DON Chief Information Officer, shall review ISPs for all ACAT I and IA programs, and special interest programs designated by the Assistant Secretary of Defense (Networks and Information Integration) (ASD(NII)). DASN(Space & C4I) shall submit ISPs for such programs to ASD(NII), Defense Information Systems Agency (DISA), and the Joint Staff (J-6) for review. ISPs shall be approved by the cognizant PEO, SYSCOM Commander, DRPM, or

designee, upon completion of the coordination and review process. Should interoperability issues arise between ACAT I or IA programs and less than ACAT I or IA programs, PMs shall, if requested, provide ISPs to DASN(Space & C4I) to support issue resolution.

3.7 Electromagnetic Environmental Effects (E3) and Electromagnetic Spectrum Certification and Supportability

The following paragraphs contain policy and procedures for implementing E3 and electromagnetic spectrum certification and supportability for Navy and Marine Corps programs per references (o), (p), and (q). These policies and procedures ensure that spectrum dependent equipment and systems are designed to be mutually compatible with other electronic equipment and the operational electromagnetic environment, and are spectrum certified.

3.7.1 E3

E3 design requirements for communications and electronics (C-E) systems and equipments shall be identified in performance specifications during the acquisition process and integrated into all developmental and operational tests per references (o) and (p).

3.7.2 Electromagnetic Spectrum Certification and Supportability

Electromagnetic spectrum certification (i.e., equipment frequency allocation) and supportability shall be obtained prior to Milestone B and currency of frequency allocation and supportability confirmed at each subsequent milestone.

3.7.2.1 Electromagnetic Spectrum Certification Compliance

Spectrum certification is obtained with approval of DD Form 1494 by CNO (N6) for Navy programs and HQMC (C4) for Marine Corps programs. The approved DD Form 1494 is submitted to the Navy and Marine Corps Spectrum Center (NMSC) for coordination with the Military Communications-Electronics Board (MCEB). PMs shall obtain approval of DD Form 1494 prior to Milestone B, and confirm currency of the frequency allocation at each subsequent milestone.

3.7.2.2 Electromagnetic Spectrum Supportability

Electromagnetic spectrum supportability is obtained via approval of Electromagnetic Spectrum Supportability Assessment Factors listed in Table E3T4, by ASN(RD&A), or designee, for ACAT I, IA, and II programs, and by the MDA for ACAT III and IV programs. PMs shall ensure the items indicated in the table are completed prior to Milestone B and each subsequent milestone. Additionally, PMs shall complete supportability assessment

factors of Table E3T4 prior to award of a contract for acquisition of any system that employs the electromagnetic spectrum.

Table E3T4 Electromagnetic Spectrum Supportability Assessment Factors

Assessment Factors	Applicable Program Information
Confirm that the system has obtained electromagnetic spectrum certification	DD Form 1494
Confirm that the cost of electromagnetic spectrum supportability has been included in the program life-cycle cost estimate (PLCCE) and the economic analysis (EA) for MAIS	PLCCE EA for MAIS
Confirm that the proposed frequency allocation and its application have been addressed in the applicable program information and are in compliance with Global Information Grid policies, architecture, and interoperability standards	APB (interoperability KPP) IA Strategy C4I Support Plan/Information Support Plan (information exchange requirements (IERs)/Net-Ready requirements)
Specify the geographic location where the equipment will be deployed. Assess technical, cost, and schedule risk for any restrictions or barriers for use of the equipment in the specified geographic location	DD Form 1494 ICD/CDD/CPD Risk Assessment
Confirm that the system has been included in the DON Application and Database Management System (DADMS)	DADMS

3.8 Technology Protection

Each DON program that contains critical program information shall prepare a program protection plan (PPP) per references (l) and (r). PPPs shall include a classified Anti-Tamper annex that has ASN(RD&A) CHENG's technical concurrence. ASN(RD&A) CHENG is the DON point-of-contact for anti-tamper matters supporting the DOD Anti-Tamper Executive Agent.

CNO (N2, N3/N5, and N6) shall provide operations security (OPSEC) and OPSEC enhancement planning guidance during Initial Capabilities Document (ICD) review. CNO (N2, N3/N5, and N6) shall coordinate guidance preparation and shall assist the program manager's (PM's) staff in subsequent OPSEC and program protection planning involving critical program information. Detailed policy and procedures are found in reference (r).

3.9 Periodic Reporting

Periodic reports are status reports provided during acquisition phases. They serve to inform the MDA as to cost, schedule, and technical performance status. See reference (b) and this instruction, enclosure (3), Tables E3T1 and E3T2, for implementation requirements.

3.9.1 Program Plans

In some cases, program plans are mandatory and are program decision point documents that are included in the statutory and regulatory information and milestone requirements tables of this

instruction, enclosure (3), Tables E3T1 and E3T2.

Mandatory program plans are the TEMP; Operational Test Plan; Information Support Plan (formerly the C4I Support Plan) (for programs that interconnect to the communications and information infrastructure); Program Protection Plan (PPP) (for programs that have critical program information (CPI)); Training System Plan (TSP) (see reference (s) for the Navy TSP); and Systems Engineering Plan.

PMs shall approve program plans, except for the TEMP, Operational Test Plan, TSP, Technology Assessment and Control Plan (TA/CP), AoA Plan, Systems Engineering Plan, and Information Support Plan/C4I Support Plan. The Systems Engineering Plan may be part of the acquisition strategy and will be approved by the MDA at Program Initiation for Ships and Milestones A, B, and C.

The Acquisition Plan (AP) is a procurement document, not an acquisition program milestone document, however it is mandatory for procurements above the dollar thresholds established by the Defense Federal Acquisition Regulation Supplement.

3.9.2 Acquisition Program Baseline (APB) Reporting

All ACAT programs shall have APBs per Tables E3T1 and E3T2. PMs for all DON ACAT programs shall establish program objectives and thresholds in APBs for each cost, schedule, and performance parameter. Cost in the APB should be based on the program's life-cycle cost estimate as approved by the MDA. The PM shall report the current estimate of each APB parameter periodically to the MDA. The PM shall report the current APB estimates for ACAT I and IA programs quarterly in the DAES.

3.9.3 Defense Acquisition Executive Summary (DAES) -- (DD-AT&L(Q)1429)

DAES reports are required for ACAT I and IA programs, and shall be submitted to ASN(RD&A) no later than the 15th day of the program's designated quarterly reporting month. Electronic copies in Consolidated Acquisition Reporting System (CARS) format shall be provided for each submission.

3.9.4 Selected Acquisition Report (SAR) -- (DD-AT&L(Q&A)823)*

SAR reports are required for ACAT I programs, and shall be submitted to ASN(RD&A) no later than the 15th day after the President sends the budget to Congress. Quarterly SARs shall be submitted no later than the 15th day after the end of the reporting period. Electronic copies in the CARS format shall be provided for each annual and quarterly SAR. Final SAR content shall be as specified by the Under Secretary of Defense (Acquisition, Technology, and Logistics)(USD(AT&L)) and ASN(RD&A). Classified annual SARs and quarterly SARs shall be

handled as working papers until approved and published by USD(AT&L).

*Not applicable to ACAT IA programs.

3.9.5 Unit Cost Reports (UCRs) -- (DD-AT&L(Q&AR)1591)*

UCRs apply to all SAR reporting programs. See the Defense Acquisition Guidebook for implementation guidance. Notification of unit cost threshold breaches shall be made immediately, via the chain of command, to ASN(RD&A).

*Not applicable to ACAT IA programs.

3.9.6 Past Performance Reporting/Reports

The use of past performance information in source selection is required by references (t) through (x). The DON automated system for reporting this information is the Contractor Performance Assessment Reporting System (CPARS) which is accessible via the Internet at "http://www.cpars.navy.mil/". PM's have the responsibility for providing an annual assessment of their contractors' performance in the CPARS.

The PMs shall report their contractor assessment information per the CPARS procedures of reference (y) for those contractors that meet the following dollar thresholds:

1. Systems (new development and major modifications)	≥ $5 million
2. Ship Repair and Overhaul	≥ $0.5 million
3. Services	≥ $1 million
4. Information Technology	≥ $1 million
5. Operations Support	≥ $5 million

Chapter 4
Information Technology (IT) Considerations

References:
(a) DoD Instruction 5000.2, "Operation of the Defense Acquisition System," 12 May 03 (NOTAL)
(b) SECNAVINST 5000.36, "Department of the Navy Data Management and Interoperability," 1 Nov 01 (NOTAL)
(c) DoD Directive 4630.5, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 5 May 04 (NOTAL)
(d) DoD Instruction 4630.8, "Procedures for Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 30 Jun 04 (NOTAL)
(e) Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01D, "Joint Capabilities Integration and Development System," 12 Mar 04 (NOTAL)
(f) Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3170.01A, "Operation of the Joint Capabilities Integration and Development System," 12 Mar 04 (NOTAL)
(g) CJCSI 6212.01C, "Interoperability and Supportability of Information Technology and National Security Systems," 20 Nov 03 (NOTAL)
(h) DoD Directive 8500.1, "Information Assurance," 24 Oct 02 (NOTAL)
(i) DoD Instruction 8500.2, "Information Assurance (IA) Implementation," 6 Feb 03 (NOTAL)
(j) DoD Instruction 5200.40, "Department of Defense Information Technology Security Certification and Accreditation Process," 30 Dec 97 (NOTAL)
(k) SECNAVINST 5239.3, "Department of the Navy Information Systems Security (INFOSEC) Program," 14 Jul 95 (NOTAL)

4.1 Clinger-Cohen Act Compliance

The Clinger-Cohen Act (CCA) applies to all IT systems including National Security Systems (NSS). Acquisition category (ACAT) IAM and IAC programs require a CCA compliance certification while all other ACAT programs containing Mission-Critical (MC) or Mission-Essential (ME) IT systems, including NSS require CCA compliance confirmation. See reference (a), enclosure (4), for minimum requirements to demonstrate compliance with the CCA for ACAT programs containing MC or ME IT systems, including NSS. The website www.doncio.navy.mil provides additional guidance, the CCA compliance table, and a sample signature page confirming CCA compliance for ACAT ID, IC, II, III, and IV programs, and abbreviated acquisition programs

(AAPs); and a sample signature page for CCA certification for ACAT IAM and IAC programs.

4.1.1 CCA Compliance Package Development and Processing for ACAT IAM, IAC, ID, IC, and II Programs containing MC or ME IT Systems including NSS

The PM shall prepare the CCA Compliance Package (the completed CCA table, signature page, and supporting documentation) in coordination with the Command Information Officer (IO). The Command IO for the Marine Corps is the Department of the Navy (DON) Deputy Chief Information Officer (CIO) (Marine Corps), the Deputy Director for Command, Control, Communications, and Computers (C4) at Headquarters Marine Corps (HQMC). The PM may use an integrated product team (IPT) structure to aid in coordinated development. The PM shall forward the CCA Compliance Package to the Command IO for concurring signature. The Command IO shall review and then forward the CCA Compliance Package to DON CIO and DASN (Space and C4I) concurrently, at least 3 months prior to each scheduled program decision point. (A PEO program manager or DRPM shall also prepare the CCA Compliance Package and may obtain assistance in its creation and coordination from the Command IO. A PEO program manager or DRPM may forward the CCA Compliance Package to the Command IO or shall forward the CCA Compliance Package to DON CIO and DASN (Space and C4I) concurrently, at least 3 months prior to each scheduled program decision point.)

DON CIO and DASN (Space and C4I) shall review the CCA Compliance Package. If the CCA Compliance Package contains the necessary information, it will be confirmed (for ACAT ID, IC, and II programs) or certified (for ACAT IAM and IAC programs) by DON CIO. In each case, a copy of the signed CCA Compliance Package will be forwarded to the PM and the MDA. For MDAP and MAIS programs a copy will also be forwarded to DOD CIO. No Milestone A, B, or Full-Rate Production decision (or their equivalent) shall be granted for a MAIS until the DOD CIO certifies that the MAIS program is being developed per the CCA. The DOD CIO also has the responsibility to subsequently certify to the Congressional defense committees that a MAIS program is being developed per the CCA.

4.1.2 CCA Compliance Package Development and Processing for ACAT III, IV, and AAP Programs containing MC or ME IT Systems including NSS

The PM shall prepare the CCA Compliance Package (the completed CCA table, signature page, and supporting documentation), in coordination with the Command IO. The Command IO for the Marine Corps is the DON Deputy CIO (Marine Corps), the Deputy Director for C4 at HQMC. The PM may use an integrated product team (IPT) structure to aid in coordinated development. The PM shall forward the CCA Compliance Package to the Command IO. (A PEO program manager or DRPM shall also prepare the CCA

Compliance Package and may obtain assistance in its creation and coordination from the Command IO. A PEO program manager or DRPM may forward the CCA Compliance Package to the Command IO or shall forward the CCA Compliance Package to DON CIO and DASN (Space and C4I) concurrently, at least 3 months prior to each scheduled program decision point.)

The Command IO shall review the CCA Compliance Package. (DON CIO and DASN (Space and C4I) shall review those CCA Compliance Packages forwarded from a PEO program manager or a DRPM.) Once the Package is determined to contain the necessary information, it will be confirmed by the Command IO (or DON CIO for those sent from a PEO program manager or a DRPM) and a copy forwarded to the PM and the MDA. The DON CIO will generally rely upon the Command IO to confirm CCA compliance, but may conduct a more detailed review of the compliance documentation, on a case-by-case basis. The Command IO shall maintain records of all ACAT III, IV, and AAP programs for which they have approved CCA Confirmations.

4.2 Contracts for Acquisition of MC or ME IT Systems

No contract shall be awarded that acquires a MC or ME IT system, including a NSS, until:

1. The IT system is registered in the DON IT Registration Database (Contact your Command IO for assistance with IT Registration),

2. The Information Assurance Strategy is coordinated with the DOD CIO for ACAT ID, IAM, and IAC programs, and approved by the DON CIO for ACAT ID, IC, IAM, IAC, and II programs, or by the respective Command IO for ACAT III, IV, and abbreviated acquisition program (AAP) programs, (A PEO program manager or a DRPM may have their ACAT III, IV, and AAP program Information Assurance Strategy approved by the DON CIO.), and

3. Compliance with the CCA is certified for ACAT IAM and IAC programs and confirmed for ACAT ID, IC, II, III, IV, and AAP programs.

4.3 Information Interoperability

Information interoperability enables effective warfighting and combat support operations, both within DON and with Joint activities, with our allied and coalition partners and non-CIO agencies. During the acquisition life cycle, all programs shall implement data management interoperability (DMI) processes, procedures, and tools per reference (b).

The interoperability and supportability of acquisition programs, including IT and NSS programs, shall comply with references (b) through (g).

4.4 Information Assurance (IA)

An information assurance strategy is required at Milestone A (MAIS only), Milestones B and C, Full-Rate Production Decision Review (FRP DR), and prior to contract award for any MC or ME IT system, including a NSS. The PM/Designated Approving Authority (DAA) shall comply with the information assurance policy of references (h), (i), (j), and (k) for all weapon and IT systems. Compliance with references (h), (i), (j), and (k) specifically includes:

1. Conduct a system risk assessment based on system criticality, threat, and vulnerabilities;

2. Incorporate appropriate countermeasures;

3. Demonstrate the effectiveness of those countermeasures through the Defense Information Technology Security Certification and Accreditation Process (DITSCAP);

4. Ensure that the responsible DAA accredits the system;

5. Incorporate existing, or develop new, protection profiles, per reference (i), to consolidate security-related requirements and provide effective management oversight of the overall security program; and,

6. Develop an IA strategy and obtain approval from the DON CIO for ACAT ID, IC, IAM, IAC, and II programs. The DON CIO staff will forward IA strategies for all ACAT ID, IAM, and IAC programs to the DOD CIO for review prior to approval by the DON CIO. The respective Command IO will approve IA strategies for ACAT III, IV, and AAP programs. (A PEO program manager or a DRPM may send their IA strategies for ACAT III, IV, and AAP programs to DON CIO for approval.) The DON CIO template can be obtained at the website www.doncio.navy.mil, by clicking on the Project Team tab, then clicking on Information Assurance.

PMs are responsible for ensuring that security requirements are addressed as part of the acquisition program. Per reference (h) and (i), they shall address information assurance requirements throughout the life cycle of all DoD systems. PMs shall manage and engineer information systems using the best processes and practices known to reduce security risks, including the risks to timely accreditation. Acquisition fundamental IA requirements for DoD information systems are established in reference (i), in the form of two sets of graded baseline IA controls. IA controls addressing availability and integrity requirements are keyed to the system's mission assurance category (MAC). The PM shall use the MAC and confidentiality levels appropriate to their system or service as specified in the CDD and CPD and address the resulting IA controls. The PM shall incorporate approved CDD-derived and CPD-derived information assurance requirements into program design

activities to ensure appropriate availability, integrity, authentication, confidentiality, and non-repudiation of program and system information and the information systems themselves, as specified in the applicable System Security Authorization Agreement (SSAA). PMs shall also provide for the survivability of information by incorporating protection, detection, reaction, and reconstitution capabilities into the system design, as appropriate, and as allocated in SSAAs.

See reference (a), enclosure 4, for implementation requirements for all DON ACAT programs.

Chapter 5
Integrated Test and Evaluation

References:
(a) Marine Corps Order (MCO) 3960.2B, "Marine Corps Operational Test and Evaluation Activity," 24 Oct 94 (NOTAL)
(b) DoD Instruction 5000.2, "Operation of the Defense Acquisition System," 12 May 03 (NOTAL)
(c) SECNAVINST 5200.40, "Verification, Validation, and Accreditation (VV&A) of Models and Simulations," 19 Apr 99 (NOTAL)
(d) Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 6212.01C, "Interoperability and Supportability of Information Technology and National Security Systems," 20 Nov 03 (NOTAL)
(e) DoD Instruction 8500.2, "Information Assurance Implementation," 6 Feb 03 (NOTAL)
(f) DoD Instruction 5200.40, "Department of Defense Information Technology Security Certification and Accreditation Process," 30 Dec 97 (NOTAL)
(g) SECNAVINST 5239.3, "Department of the Navy Information Systems Security (INFOSEC) Program," 14 Jul 95 (NOTAL)
(h) OPNAVINST 2450.2, "Electromagnetic Compatibility Program within the DON," 8 Jan 90 (NOTAL)
(i) DoD Instruction 4630.8, "Procedures for Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 30 Jun 04 (NOTAL)
(j) SECNAVINST 5000.36, "Department of the Navy Data Management and Interoperability," 1 Nov 01 (NOTAL)
(k) SECNAVINST 5100.10H, "Department of the Navy Policy for Safety, Mishap Prevention, Occupational Health and Fire Protection Programs," 15 Jun 99 (NOTAL)
(l) OPNAVINST 5100.8G, "Navy Safety and Occupational Safety and Health Program," 2 Jul 86 (NOTAL)
(m) OPNAVINST 5090.1B, "Environmental and Natural Resources Program Manual," 4 Jun 03 (NOTAL)
(n) OPNAVINST 5100.23F, "Navy Occupational Safety and Health (NAVOSH) Program Manual," 15 Jul 02 (NOTAL)
(o) DoD Directive 5230.24, "Distribution Statements on Technical Documents," 18 Mar 87 (NOTAL)
(p) SECNAVINST 3900.43B, "Navy Scientific and Technical Information Program," 26 Feb 02 (NOTAL)

5.1 Test and Evaluation (T&E) Overview

T&E is conducted continuously throughout the acquisition life cycle of a system:

1. For statutory and regulatory reasons, and

2. To gain knowledge that can be used to:

   a. Advance system development,

   b. Make programmatic acquisition decisions, and

   c. Inform users about the system's operational characteristics and performance.

This enclosure delineates the mandatory T&E roles, responsibilities, procedures, and requirements for Department of Navy acquisition programs. While T&E is divided into contractor, developmental, operational, and live fire testing, it shall be integrated and coordinated with the users, the system developers, and the testers to the fullest extent allowed by statute and regulation. The integration and coordination of T&E shall start early, preferably during concept refinement. Where mandatory T&E procedures and requirements are not provided for herein or need clarification, guidance shall be requested for Navy programs from the Chief of Naval Operations (CNO) Test & Evaluation and Technology Requirements (N091), or for Marine Corps programs from the Director, Marine Corps Test and Evaluation Activity (MCOTEA).

5.2 DON Responsibilities for T&E

To effect an efficient forum for collaboration, personnel who participate in test and evaluation processes for the DON must have fundamental knowledge of the DoD practice of Integrated Product Teams and the responsibilities of organizations contained in this instruction. The responsibilities contained herein are not meant to be restrictive in nature, but to provide a common base for all T&E participants to communicate organization, plans, and execution. In addition to understanding the intent of T&E guidance provided in this instruction, DON personnel should utilize web-enabled knowledge forums to amplify their knowledge of standard and best practices, lessons learned, and to ensure compliance with legal statutes and regulations.

5.2.1 Principal Navy T&E Points of Contact and Responsibilities

5.2.1.1 Chief of Naval Operations (CNO) (N091)

CNO (N091) is responsible to the CNO for establishing Navy T&E policy, determining the adequacy of T&E infrastructure required to support systems testing, coordinating Navy participation in joint testing matters, reviewing capabilities

documents (e.g., Initial Capabilities Document (ICD), Capability Development Document/Capability Production Document (CDD/CPD)) for testability, and resolving developmental and operational test issues. CNO (N091) shall act as the final authority and signatory for Test and Evaluation Master Plans (TEMPs) prior to Component Acquisition Executive (CAE) approval and signature. CNO (N091) shall be responsible for overseeing testing matters associated with Marine Corps aircraft, aviation equipment, and air traffic control and landing (ATCAL) equipment.

5.2.1.2 Program Manager (PM)

The PM shall, in concert with the developer, user, and testing communities, coordinate developmental test and evaluation (DT&E), operational test and evaluation (OT&E), and live-fire test and evaluation (LFT&E) into an efficient continuum, closely integrated with system design, development, production, and sustainment, that achieves the approved capability. The necessary time and resources shall be planned and budgeted to ensure adequate testing is conducted to support decision makers and the users throughout the life cycle of the acquisition.

5.2.1.3 Commander, Operational Test and Evaluation Force (COMOPTEVFOR)

COMOPTEVFOR is the designated Operational Test Agency (OTA) for the United States Navy and Marine Corps aviation programs assigned to CNO sponsorship. COMOPTEVFOR shall: plan, conduct, evaluate, and report the OT&E of Acquisition Category (ACAT) I, IA, II, III, and IVT programs; monitor ACAT IVM programs; evaluate initial tactics for systems that undergo OT&E; and make fleet release or introduction recommendations to CNO for all ACAT programs and those system configuration changes selected for OT&E. COMOPTEVFOR prepares the Part IV and operational test resources of Part V with the exception of live-fire test and evaluation (LFT&E) for the Test and Evaluation Master Plan (TEMP). COMOPTEVFOR shall coordinate for multi-service and joint OT&E, and is the lead OTA when the Navy is assigned lead. COMOPTEVFOR is the designated RDT&E fleet-support scheduling agent for CNO (N091).

5.2.1.4 Naval Systems Commands (SYSCOMs)

SYSCOMs shall manage assigned facilities and personnel to ensure efficient and effective integration of DT&E and LFT&E of systems within the SYSCOM's domain. When requested and funded, SYSCOMs will support programs with the resources needed to coordinate planning, scheduling, and executing T&E throughout the continuum of system development.

5.2.1.4.1 Naval Air Systems Command (NAVAIRSYSCOM)

NAVAIRSYSCOM, in support of program managers (PMs), shall conduct DT&E and LFT&E for Navy and CNO sponsored Marine Corps aircraft, aviation systems, and ATCAL equipment.

5.2.1.4.1.1 Naval Air Systems Command Technical Assurance Board (NTAB)

The NTAB shall monitor emerging aircraft and aircraft-related programs under development. All aircraft ACAT I Naval Aviation programs and other select programs when requested by the Developing Activity (DA), the resource sponsor, or CNO (N091) shall be monitored until completion of IOT&E. Monitoring shall continue until all major deficiencies are resolved or the program is removed from the Major Defense Acquisition Program (MDAP) list.

5.2.1.4.2 Weapons System Explosive Safety Review Board (WSESRB)

The WSESRB is the Navy's independent agent for assessing energetic systems, weapons, and those systems that manage and control weapons for safety compliance. WSESRB review findings provide the fundamental explosives safety input for the conduct of final developmental and operational testing and for major acquisition decisions.

5.2.1.5 Office of Naval Intelligence (ONI)

ONI is the designated naval activity responsible for threat intelligence and validating threat tactics supporting T&E of Navy acquisition programs. For ACAT ID programs, ONI threat assessments will be validated by the Defense Intelligence Agency (DIA) per reference (b).

5.2.2 Principal Marine Corps Points of Contact and Responsibilities

Note: In 1996, SECNAVINST 5000.2B replaced Marine Corps Orders assigning responsibilities for T&E.

5.2.2.1 Deputy Commandant for Manpower and Reserve Affairs (DC,M&RA)

DC,M&RA assigns personnel per established manpower requirements for Marine Corps participation in JT&E and in support of OT&E for ACAT I and designated ACAT II programs within manpower guidelines established by the Deputy Commandant, Combat Development (DC,CD) and after consultation with Commanding General, Marine Corps Systems Command (CG, MARCORSYSCOM) and the Director, Marine Corps Operational Test and Evaluation Activity (MCOTEA).

DC,M&RA is designated the functional manager for Marine Corps Manpower Systems' automated information systems (AISs).

DC,M&RA is responsible for developing the concept of employment (COE) and mission essential functions for Manpower AISs and interoperability and standards requirements for capability development/production documents (CDD/CPDs). DC,M&RA will provide representatives to coordinate with CG, MARCORSYSCOM, the Marine Corps DRPMs, and Director, MCOTEA, to assist in determining AIS program failure definition (FD)/scoring criteria (SC) for each manpower system's AIS program under development and provide a voting member for scoring conferences.

5.2.2.2 Deputy Commandant for Installations and Logistics (DC,I&L)

DC,I&L is designated the functional manager for Marine Corps Logistics Systems' AISs.

5.2.2.3 Director, Marine Corps Intelligence Activity (MCIA)

Director, MCIA shall provide CG, MARCORSYSCOM, Marine Corps Direct Reporting Program Managers (DRPMs), and Director, MCOTEA, with a threat test support package (TTSP) based on the latest system threat assessment (STA). The TTSP should include all threat data required to support DT, OT and LFT&E.

5.2.2.4 Deputy Commandant for Combat Development (DC,CD)

DC,CD shall develop the COE, Operational Mode Summary/Mission Profiles (OMS/MP), and mission-essential functions for proposed non-AISs and interoperability and standards requirements for capability development/production documents (CDD/CPDs). In coordination with CG, MARCORSYSCOM, the Marine Corps DRPMs, and Director, MCOTEA, provide a representative to assist in determining non-AIS program Failure Definition and Scoring Criteria (FD/SC) for each program under development and provide a voting member for scoring conferences.

DC,CD provides oversight of joint test and evaluation (JT&E) for the Commandant of the Marine Corps (CMC) and Headquarters Marine Corps Staff to ensure T&E activities directly support the CMC's responsibilities for readiness and mission capability of the Fleet Marine Force (FMF). DC,CD will be the primary interface with Joint Interoperability Test Command (JITC) for all joint test and evaluation issues.

5.2.2.5 Commanding General, Marine Corps Systems Command (CG, MARCORSYSCOM)

CG, MARCORSYSCOM shall budget for DT&E and OT&E and act as the focal point for interface with the Board of Operating Directors for T&E (BoOD(T&E)). CG, MARCORSYSCOM provides oversight of programming activities related to T&E for the Commandant of the Marine Corps (CMC) and Headquarters Marine Corps Staff to ensure T&E activities directly support the CMC's

responsibilities for readiness and mission capability of the Fleet Marine Force (FMF). The CG, MARCORSYSCOM PM shall provide a test support package (TSP) to the Director, MCOTEA, one year before scheduled OT start. The TSP should include, at a minimum, early T&E, a CDD/CPD, a STA, a threat scenario, a DC,CD-approved COE, program documentation addressing support and life-cycle management of hardware and computer resources, and an organizational structure to include a table of organization and table of equipment. Upon request, the PM should provide software documentation. The threat scenario must include a signed concurrence from MCIA. CG, MARCORSYSCOM serves as the Marine Corps point of contact with Office of Secretary of Defense (OSD) on matters relating to LFT&E per reference (a). CG, MARCORSYSCOM shall consolidate and process quarterly requests for use of naval fleet assets in support of research, development, test, and evaluation (RDT&E) requirements. CG, MARCORSYSCOM shall represent the Marine Corps in all DT&E matters. CG, MARCORSYSCOM shall be the primary interface with JITC on joint interoperability testing conducted during DT. The CG, MARCORSYSCOM shall exercise review and approval authority over TEMPs for assigned programs and multi-service programs. The CG, MARCORSYSCOM PM shall establish and chair a Test and Evaluation Working Integrated Product Team (T&E WIPT) for all assigned programs. CG, MARCORSYSCOM shall certify that systems are safe and ready for DT&E and OT&E. CG, MARCORSYSCOM shall manage the Marine Corps External Airlift Transportation (EAT) Certification Program and the Marine Corps Foreign Comparative Testing Program.

5.2.2.6 Director, Marine Corps Operational Test and Evaluation Activity (MCOTEA)

MCOTEA is the designated Operational Test Agency (OTA) for the United States Marine Corps. Director, MCOTEA shall ensure that the OT for all ACAT programs is effectively planned, conducted, evaluated, and reported; and shall coordinate the scheduling of resources for OT requiring FMF support through the Two Year Master Test Plan (TYMTP) published annually with quarterly updates. Director, MCOTEA, shall host and chair a T&E WIPT for determining FD/SC for each program. Director, MCOTEA, shall prepare Part IV of the TEMP, with the exception of LFT&E. Director, MCOTEA, shall request, from CMC, the assignment of a Test Director (TD) for ACAT I and certain ACAT II programs. Director, MCOTEA, shall task the FMF and other commands in matters related to OT&E by publishing a Test Planning Document (TPD). When significant test limitations are identified, the Director, MCOTEA, shall advise the MDA of risk associated in the procurement decision. Director, MCOTEA, shall manage those OSD-directed multi-Service OT&Es for which the Marine Corps is tasked. Director, MCOTEA, shall chair and conduct an operational test readiness review (OTRR) for determining a program's readiness to proceed with OT&E. See this instruction, enclosure (5), paragraph 5.6, for further guidance. Director, MCOTEA, shall prepare and provide directly to the CMC, within 120 days after completion of OT&E, an independent evaluation report for

all OT&E. Director, MCOTEA, shall coordinate Marine Corps support for other military Services' OT&Es. Director, MCOTEA, shall advise the Assistant Commandant of the Marine Corps (ACMC) on OT&E matters. Director, MCOTEA, shall chair an annual OT&E planning conference. The conference should have representation from the FMF, appropriate HQMC staff offices, DC,CD, CG, MARCORSYSCOM, and others, as appropriate. Director, MCOTEA, shall maintain direct liaison with OSD's Director of Operational Test and Evaluation (DOT&E), the FMF for OT&E matters, and other military activities and commands, as required. Director, MCOTEA shall represent the Marine Corps in all Multi-Service OT&E matters. Director, MCOTEA shall be the primary interface with JITC on joint interoperability testing conducted during OT.

5.2.2.7 Marine Forces

The Commanding Generals, Marine Forces Pacific (MARFORPAC) and Marine Forces Atlantic (MARFORLANT) shall designate a test coordinator as a focal point for all T&E matters and support MCOTEA in the T&E of new concepts, equipment, and systems. The Marine Forces shall provide a TD who will write the OT report and submit it to MCOTEA via the CG of the appropriate Marine Forces within 30 days of completion of OT&E for an ACAT II, III, or IV program. The Marine Forces shall provide personnel and equipment to participate in JT&E programs, as required.

5.2.3 Acquisition Items Exempt from T&E Provisions within this Instruction

5.2.3.1 Items Exempt

The following items are tested by other organizations and are exempt from the T&E provisions of this instruction:

1. Cryptographic or Cryptology equipment

2. Naval Nuclear Reactors and associated Systems

3. Nuclear Weapons

4. Medical and Dental Systems

5. Spacecraft and Space-based systems

5.2.3.2 T&E Considerations that Apply to Exempt Items

The exemption herein does not apply to the following aspects of these items:

1. Information Technology (IT) administrative systems

2. Ships or Aircraft that carry these systems

3. Other systems that these exempt items support

4. Testing conducted at the request of or in cooperation with above parent organizations

When the performance of these exempted items affects the effectiveness, suitability, survivability, or lethality of a system not exempt (e.g., communications system with embedded cryptology subsystem, ship with nuclear propulsion), then the exempted item's performance may be considered in the T&E of the supported system. Such performance assessments must be coordinated with and approved by the organization with direct responsibility for the exempted item (e.g., National Security Agency (NSA) for cryptology systems or naval reactors for naval nuclear propulsion systems).

5.3 T&E Strategy

5.3.1 Preparation and Milestones

See reference (b), enclosure 5, for guidance in preparing a T&E strategy (TES) that is required at Milestone A. The TES documents a strategy of realistic test concepts that support development decisions throughout the acquisition life-cycle. The TES must include adequate detail to construct pre-Milestone B assessments and tests. The TES is the precursor to the TEMP that is required for Milestone B and beyond. While specific program alternatives are generally unknown before Milestone B, the TES needs to address: the maturity level of the technology; anticipated DT&E, OT&E, and LFT&E concepts; and early predictions of test support requirements that may need development or procurement. When Modeling and Simulation (M&S) is part of the TES, the M&S proponent shall provide the strategy to comply with verification, validation and accreditation per reference (c). For OT&E events prior to Milestone B, the TES shall identify objectives, scope, and funding, as well as overall evaluation strategy. Programs shall conform to DOT&E policies and guidelines when preparing TES documentation, unless granted relief by the TEMP approval authority.

5.3.2 Strategy Approval

The T&E strategies for programs on the OSD T&E Oversight List require the approval of DOT&E and the USD(AT&L). Programs on the OSD T&E Oversight List will prepare a T&E strategy and coordinate with CNO (N091) or Director, MCOTEA for submission via the same approval process for a TEMP.

5.4 T&E Planning

5.4.1 Early Planning for Integrated T&E

Early involvement by test agencies is required to ensure successful execution of integrated testing. The DA, test agencies, and user representative (resource sponsor) must share a

common interpretation of the system capability needs so that DT and OT are tailored to optimize resources, test scope, and schedule. Early, active, and continuous participation by test agencies during the development of capabilities documents will support effective communication and common interpretation.

5.4.2 Testing Increments in Evolutionary Acquisition

Developing Agencies shall ensure adequate DT&E, OT&E, and LFT&E are planned, funded, and executed for each new increment capability, as required. The PM shall ensure an independent phase of OT&E is completed prior to release of each increment to the user. Potentially short cycle times between milestone decisions necessitate early collaboration between the OTA, JITC, test resource providers (labs, ranges, instrumentation sources, etc.), sponsors, requirements officers, and oversight agencies in test planning for efficiency and testability that effectively evaluates system capabilities and performance. In addition to integrating test events to the fullest extent within statute and regulation, planners shall consider parallel development and review of the TEMP and relevant capabilities documents (e.g., CDD/CPD).

5.4.2.1 Innovative Testing

Short incremental development or spiral development cycle times and simultaneous testing of multiple increments may require innovative methods not discussed in this or other acquisition documents. Innovative or irregular methods will be described within the appropriate sections of the TEMP. TEMP concurrence and approval will formalize the agreement to implement those methods for use in the program.

5.4.2.2 IOT&E

The PM shall ensure IOT&E is completed prior to proceeding beyond Low Rate Initial Production (LRIP) for ACAT I and II programs as required by Title 10 U.S.C., Section 2399 and for all other programs on the OSD T&E Oversight List as required by reference (b). The PM shall ensure OT&E is conducted for each evolutionary acquisition increment for programs requiring OT&E. DOT&E, for programs on the OSD T&E Oversight List, and the OTA, for programs not on the OSD T&E Oversight List, shall determine the number of production or production-representative test articles required for IOT&E. To efficiently resource OT&E requirements, the OTA shall plan to leverage all operationally relevant T&E data and provide the PM with an early projection as to OT&E scope and resource requirements. See reference (b), enclosure 5, for implementation requirements for DON ACAT programs.

5.4.2.3 Software Intensive Systems

The OTAs are encouraged to use DOT&E and CNO (N091) best practice guidance for testing software intensive system increments (Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) and Major Automated Information System (MAIS) systems) in evolutionary acquisition. Although this decision process is discretionary, it effectively defines the scope and level of testing based on potential risk to mission areas, overall system complexity, and the complexity of changes in functionality within each increment. Innovative approaches are encouraged, but require coordination with oversight agencies to ensure adequacy of testing.

5.4.3 Test and Evaluation Working Integrated Product Team (T&E WIPT)

Formerly referred to as a Test Planning Working Group (TPWG), the T&E WIPT is a DoD wide accepted forum for representatives from across program disciplines and oversight agencies to discuss, coordinate, and resolve test planning goals and issues. Within DON the T&E WIPT is the accepted forum for the PM to develop the TES and TEMP. The PM or designated representative (normally a military O-6/O-5 or civilian equivalent) is responsible for initiating and chairing the T&E WIPT.

5.4.4 Navy Test and Evaluation Coordination Group (TECG)

When T&E issues arise that cannot be resolved by the T&E WIPT, a TECG should be convened. A TECG may also be used to implement urgent required changes to the TEMP. When used for urgent TEMP changes, either a page change or a formal report of the TECG resolution shall be attached to the TEMP as an annex until the next update or revision. When an activity determines a more formal solution is required to resolve an issue, the activity -- via formal correspondence -- will request that CNO (N091), as the responsible authority for T&E issue resolution, convene a TECG. For programs on the OSD T&E Oversight List, the TECG chair, (CNO (N091)) shall coordinate results with DOT&E and USD(AT&L).

5.4.5 T&E Funding Responsibility

5.4.5.1 Developing Activity Responsibilities

Except as noted below, the DA shall plan, program, budget, and fund all resources identified in the approved TEMP, to include early OT involvement costs. Funds for OT&E shall be transferred to the OTA for distribution as required. Operating costs for VX-1&9 squadrons for all T&E will be provided on a reimbursable basis by the DA to COMOPTEVFOR headquarters. The DA should not be required to fund:

1. Fleet operating costs for RDT&E support,

2. Fleet travel for training,

3. Non-program-related OTA travel and administrative costs,

4. Non-program-related INSURV travel and administrative costs, and

5. Major Range and Test Facility Base (MRTFB) institutional costs.

5.4.5.2 Fleet Commanders Responsibilities

Fleet Commanders should plan, program, budget, and fund fleet travel for training, operating costs for RDT&E support provided by fleet units, and all costs associated with routine operational expenses except procurement costs of the systems tested and COMOPTEVFOR costs.

5.4.5.3 Board of Inspection and Survey (INSURV) Responsibilities

INSURV should plan, program, budget, and fund travel costs and costs not related to programs under test.

5.4.5.4 Non-Acquisition Programs Responsibilities

The Research and Development (R&D) agency for a non-ACAT or pre-ACAT program has responsibilities equivalent to those of the DA for T&E costs.

5.4.6 RDT&E support provided by FLEET Commanders

A developing agency, program manager, COMOPTEVFOR, INSURV, or R&D agency shall request support from Fleet Commanders for the accomplishment of T&E that is documented in a TEMP or other approved test document via CNO (N091/N912). A request should normally be initiated nine (9) months prior to test event.

5.4.7 Test and Evaluation Master Plan (TEMP)

All DON ACAT programs shall implement a TEMP for all developmental, operational, and live-fire testing in compliance with reference (b), enclosure 5. The TEMP may be a stand-alone document, or it may be included as the T&E management section of a single acquisition management plan (SAMP). If the TEMP is included in the SAMP, that T&E section must undergo the normal TEMP review and approval process. Although the TEMP format is discretionary, deviations from the standard DOT&E policy require concurrence from the TEMP approval authority. The TEMP for all ACAT programs shall specify entry criteria and resources required for each phase of testing. The TEMP shall identify anticipated use of M&S and the M&S proponent's verification, validation and accreditation (VV&A) strategy per reference (c). The TEMP

documents the commitment between signatories to test events, schedules, and resources.

To meet Milestones B and C and Full-Rate Production Decision Reviews (FRP DRs), the PM for MDAPs, MAIS programs, and programs on the OSD T&E Oversight List shall submit the TEMP via concurrence of primary DON stake-holders, CNO (N091), and ASN(RD&A) to the USD(AT&L) and the DOT&E sufficiently early to satisfy review timelines designated by those agencies. TEMPS for ACAT II programs shall be approved by ASN(RD&A). The MDA for all other ACAT TEMPs shall have final approval authority. CNO (N091) is the OPNAV single point of contact for TEMP coordination with OSD. The DA is responsible for distribution of an approved TEMP to all agencies involved in testing, providing support or resources, oversight, or that have a relevant and official need to access testing information.

5.4.7.1 Milestone B TEMP Approval for Systems with Integrated Architecture Capabilities

National Security Systems (NSS), Information Technology (IT) systems, and systems with Service and joint interoperability requirements, and/or systems that require use of the electromagnetic spectrum must comply with DoD and JCS Integrated Architecture Guidance. The following integrated architecture-related items must be specifically addressed in Milestone B TEMP:

1. Appropriate Net-Ready (NR) key performance parameter products per reference (d),

2. Information Assurance Mission Assurance Category (MAC) and Confidentiality Level per reference (e),

3. Security Certification and Accreditation Phase 1 System Security Authorization Agreement (SSAA) or equivalent per references (f) and (g), and

4. Spectrum Certification Draft DD-1494 or Note to Holders per reference (b).

5.4.7.2 Milestone C TEMP Approval for Systems with Integrated Architecture Capabilities

As systems mature during the development process, more detailed information becomes available. The following integrated architecture-related items must be specifically addressed in Milestone C and beyond test phases:

1. Information Assurance MAC and Confidentiality Level per reference (e),

2. Security Certification and Accreditation SSAA or equivalent per references (f) and (g),

3. Security Certification and Accreditation Interim Authority to Operate/Authority to Operate (IATO/ATO) per references (f) and (g),

4. Appropriate Net-Ready (NR) key performance parameter products per reference (d),

5. JITC assessment of interoperability readiness for OT per reference (d),

6. E3 Verification/Validation reports/documentation per reference (h), and

7. DD-1494 approved with Spectrum Certification and/or Note to Holders as appropriate (PM/Military Communications-Electronics Board (MCEB)) Agreement or equivalent per reference (b).

5.4.7.3 Capabilities and Key Performance Parameter (KPP) Traceability to Critical Operational Issues (COIs)

For DON programs, traceability will be consistent among the analysis of alternatives, ICD/CDD/CPDs, acquisition program baseline (APB), and the TEMP. The TEMP shall document in Part IV how specific ICD/CDD/CPD capabilities and KPPs trace to COIs and how each will be addressed in T&E.

5.4.7.4 Performance Thresholds and Critical Technical Parameters (CTPs)

Testable and measurable performance thresholds for DT, LFT&E, and OT shall be established. The CTPs derived from capabilities documents shall be established and incorporated in the TEMP by the PM. The operational parameters and issues derived from the ICD/CDD/CPD to be used for OT shall be established and incorporated in the TEMP by the COMOPTEVFOR/Director, MCOTEA. The numerical values for DT and OT shall be the same as, the performance parameters established in the CDD/CPD. See reference (b), enclosure 5, for implementation requirements for all DON ACAT programs.

5.4.7.5 Test Planning for Commercial and Non-Developmental Items

Use of commercial products built to non-DoD specifications dictates the need for the PM and the T&E community to be cognizant of the commercial T&E data, standards, and methods used to provide assurance for these products. In some cases, commercial T&E data or use of commercial T&E practices by the DoD T&E community may provide adequate, reliable, and verifiable information to meet specific DT&E, OT&E, or LFT&E goals. When it can be shown that commercially available T&E data or use of commercial T&E practices meet specific DoD T&E needs and cost less than their DoD T&E counterpart, they should be considered by

the PM or the OTA, and may be used to support T&E requirements.

5.4.7.6 Use of Existing T&E Infrastructure

Planners shall use existing investment in DoD ranges, facilities, and other DoD resources, to include embedded instrumentation for conduct of T&E unless it is demonstrated that the required capability does not exist within DoD or it is more cost effective to use a non-DoD resource. Projected T&E investment needs will be annotated in Part V of the TEMP. Infrastructure shortfalls that adversely impact the conduct of a specific T&E requirement will be identified in Limitations to Test in the TEMP.

5.4.7.7 Environmental Protection

Any environmental evaluation required under Title 42 United States Code 4321-4347 or Executive Order 12114 shall be completed and the PESHE signed before the decision is made to proceed with a developmental or operational test that may affect the physical environment. Testing shall be planned to ensure compliance with applicable environmental requirements including the National Environmental Policy Act (NEPA). Environmental considerations that directly affect testing shall be addressed in the TEMP as limitations or conditions of the testing. See reference (b), enclosure 7, paragraph E7.7, for implementation requirements for all DON ACAT programs.

5.4.7.8 OT&E for Non-Acquisition Programs

OTA services may be required to evaluate capabilities of non-acquisition programs or pre-systems acquisition equipment or programs. At a minimum, the requesting agency must provide a statement describing mission functions with thresholds for any capabilities of interest. A test plan must be approved by the OTA prior to any OT.

5.4.7.9 Modeling and Simulation (M&S)

Per reference (b), enclosure 5, M&S may be used during T&E of an ACAT program to represent conceptual systems that do not exist and existing systems that cannot be subjected to actual environments because of safety requirements or the limitations of resources and facilities. M&S applications include hardware/software/operator-in-the-loop simulators, land-based test facilities, threat system simulators, C4I systems integration environments/facilities, and other simulations as needed. M&S shall not replace the need for OT&E and will not be the primary evaluation methodology. M&S shall not be the only method of meeting independent OT&E for beyond low rate initial production (BLRIP) decisions per 10 USC 2399. M&S is a valid T&E tool that per reference (c) requires VV&A to supplement or augment test data. The PM is responsible for verification and validation (V&V) of M&S and the accreditation of M&S used for

DT&E. The OTA is responsible for accreditation of M&S used for OT&E. The PM is required to complete V&V prior to an accreditation decision by the OTA. M&S previously accredited for other programs or test phases still requires accreditation for specific use by the OTA for each OT&E. Use of M&S shall be identified in Part III and Part IV of the TEMP for each DT&E and OT&E phase it is intended to support.

The PM shall identify and fund required M&S resources early in the acquisition life-cycle. The T&E WIPT shall develop and document a robust, comprehensive, and detailed evaluation strategy for the TEMP, using both simulation and test resources, as appropriate. See reference (b), enclosure 5, for implementation requirements for all DON ACAT programs.

5.4.7.10 Interoperability Testing and Certification

The OTA has a responsibility to evaluate progress towards joint interoperability as part of each testing phase. Interoperability testing consists of inter-Service Navy-Marine Corps, joint Service, and where applicable, allied and coalition testing. Interoperability requirements are covered in detail by references (d), (i), and (j). Lab environments used to conduct live, constructive, and virtual interface and interoperability testing must be verified, validated, and accredited by the PM and OTA per reference (c). See reference (b) for implementation requirements for DON ACAT programs. The following general procedures apply:

1. Interoperability capabilities (requirements) will be documented in the ICD, CDD, and CPD. The PM is responsible for developing the Information Support Plan (ISP) based upon documented requirements, as well as Service-mandated and mission and/or business area integrated architectures that show GIG compliance.

2. Marine Corps-unique interfaces shall be tested during DT&E by MARCORSYSCOM, typically at Marine Corps Tactical Systems Support Activity (MCTSSA).

3. Navy-unique interfaces shall be tested during DT&E by DAs (e.g., PEO-C4I and PEO-IT).

4. DON PMs will coordinate with JITC to develop and execute interoperability testing for certification per reference (d), When appropriate, for complex programs, an Interoperability Certification Evaluation Plan (ICEP) shall be developed.

5. Navy systems processing data links (e.g., Link 4/11/16/22) and character oriented messages for human readable text (e.g., USMTF and OTH-Gold) must be tested for joint interoperability by Naval Center for Tactical Systems Interoperability (NCTSI) and by JITC for Joint certification.

6. Marine Corps systems processing data links (e.g., Link 4/11/16/22) and character oriented message human readable text (e.g., USMTF and OTH-Gold) must be initially tested for joint interoperability by MCTSSA, then by JITC for Joint certification.

7. Standard conformance testing with interoperability certification of specific data link interfaces should be accomplished prior to IOT&E. Per reference (d), a Joint Interoperability Certification or an Interim Certification to Operate (ICTO) shall be accomplished prior to FRP DR.

5.4.7.11 Information Assurance (IA) and Information Systems Security Certification and Accreditation

IA is critical to Network Centric Warfare. The MAC and Confidentiality Level, as approved by the Deputy Chief Information Officer (CIO) for the Navy or Marine Corps, establish IA control measures that must be incorporated into a system. Control measures are implemented, verified and validated via Security Certification and Accreditation (SCA). Reference (e) also requires V&V of control measures through vulnerability assessments and penetration testing. The Defense Information Technology Security Certification and Accreditation Process (DITSCAP) is the most common methodology used to V&V information assurance control measures. The PM coordinates with the OTA and the Designated Approving Authority (DAA) (CNO/CMC, or designee) to determine the extent of information systems security certification testing required. The PM documents SCA and IA controls in the TEMP and the OTA reports on these controls as part of OT. An IATO/ATO must be obtained prior to OT. The OTA will evaluate IA controls and ability to detect, respond, and restore systems during OT based upon MAC and Confidentiality Level. The OTA does not certify the system for security or IA, but evaluates the effectiveness, suitability, and survivability of the system in its intended environment.

5.4.7.12 Anti-Tamper Verification and Validation Testing

Anti-Tamper Verification and Validation (V&V) is a requirement for all systems implementing an anti-tamper plan to ensure the AT techniques stated in the AT plan are fully implemented and respond appropriately in the event of tampering. This V&V must be accomplished by an independent team and be funded by the parent acquisition program. See reference (b) for implementation requirements for DON ACAT programs that contain critical program information and anti-tamper countermeasures. DON Anti-Tamper Technical Agent, in support of ASN(RD&A) CHENG, will assist acquisition programs in understanding anti-tamper V&V requirements, program test plan development, and interactions with the DOD V&V community.

5.4.7.13 Test and Evaluation Identification Number (TEIN) Assignment

A TEIN is required before requesting fleet support services. The TEIN assists in tracking T&E documentation, scheduling fleet services, and execution of oversight requirements. The PM shall request, in writing, a TEIN from CNO (N091) via the resource sponsor.

5.5 DT&E

DT&E is required for all developmental acquisition programs. The DA shall conduct adequate DT&E throughout the development cycle to support risk management, provide data on the progress of system development, and to determine readiness for OT. For DON programs, DT&E shall be conducted by the DA through contractor testing or government test and engineering activities. Developmental testing schedules require sufficient time to evaluate results before proceeding to independent OT phases. See reference (b), enclosure 5, for implementation requirements for all DON ACAT programs.

5.5.1 DT&E Data

Data and findings from DT&E may be used by the OTA to supplement OT&E data. Within proprietary, contractual, and regulatory considerations all DT data shall be available to appropriate oversight agencies. Data will normally be made available upon completion of analysis by the primary analyzing agency. DT data and reports shall be available for review by the OTA with adequate time to finalize OT planning (normally 30 days prior to the commencement of OT). See reference (b), enclosure 5, for implementation requirements for all DON ACAT programs.

5.5.2 Information Assurance and Security Certification during DT

IA testing and System Security Certification and Accreditation shall be conducted by the PM as part of the development process to ensure that appropriate control measures are in place to support the assigned MAC and Confidentiality Level. The MAC and Confidentiality Level should be identified in capabilities development documents and have concurrence of the Deputy CIO for the Navy/Marine Corps, as appropriate. Security Certification and Accreditation Testing shall be accomplished by the PM in conjunction with the Security Certification Authority as approved by the DAA to ensure the appropriate combination of security controls and procedures have been implemented to achieve the required level of protection. Per references (f) and (g), the DAA shall provide an accreditation statement and appropriate authority to operate prior to the FRP DR, Full-Rate Production and Deployment Approval. The PM shall coordinate with the security certification authority, the OTA, and the DAA to determine the extent of security certification testing required.

5.5.3 Production Qualification T&E

See reference (b), enclosure 5, for implementation requirements for all DON ACAT programs.

5.6 Certification of Readiness for Operational Testing

5.6.1 DON Criteria for Certification

The following list of criteria for certification of readiness applies to all OT&E for all DON programs. The program manager with the concurrence of the OTA may tailor criteria listed below in sub items 2 through 20 that, at a minimum, implement DoD criteria required in reference (b), enclosure 5, paragraph E5.6. The MDA may add criteria as necessary to determine readiness for OT.

1. The TEMP is current and approved. Testing prior to Milestone B shall have an approved TES as described in this enclosure, paragraph 5.3.1.

2. DT&E results indicate DT objectives and performance thresholds identified in the TEMP have been satisfied or are projected to meet system maturity for the ICD/CDD/CPD, as appropriate.

3. All significant areas of risk have been identified and corrected or mitigation plans are in place.

4. DT&E data and reports have been provided to the OTA not less than 30 days prior to the commencement of OT, unless otherwise agreed to by the OTA.

5. Entrance criteria for OT identified in the TEMP have been satisfied.

6. System operating, maintenance, and training documents have been provided to the OTA 30 days prior to the OTRR, unless otherwise agreed to by the OTA.

7. Logistic support, including spares, repair parts, and support/ground support equipment is available as documented. Discuss any logistics support which will be used during OT&E, but will not be used with the system when fielded (e.g., contractor provided depot level maintenance).

8. The OT&E manning of the system is adequate in numbers, rates, ratings, and experience level to simulate normal operating conditions.

9. Training has been completed and is representative of that planned for fleet units.

10. All resources required to execute OT including instrumentation, simulators, targets, expendables, and funding have been identified and are available.

11. Models, simulators, and targets have been accredited for intended use.

12. The system provided for OT&E, including software, is production representative. Differences between the system provided for test and production configuration shall be addressed at the OTRR.

13. Threat information (e.g., threat system characteristics and performance, electronic countermeasures, force levels, scenarios, and tactics), to include security classification, required for OT&E is available to satisfy OTA test planning.

14. The system is safe to use as planned in the concept of employment. Any restrictions to safe employment are stated. The environmental, safety, and occupational health (ESOH) program requirements have been satisfied per references (k), (l), (m), and (n). The system complies with Navy/Marine Corps environmental, safety, and occupational health/hazardous waste requirements, where applicable. Environmental, safety, and occupational health/hazardous waste reviews and reports have been provided to COMOPTEVFOR or Director, MCOTEA. When an energetic is employed in the system, WSESRB criteria for conduct of test have been met.

15. All software is sufficiently mature and stable for fleet introduction. All software Trouble Reports are documented with appropriate impact analyses. There are no outstanding Trouble Reports that:

a. Prevent the accomplishment of an essential capability,

b. Jeopardize safety, security, or other requirements designated "critical",

c. Adversely affect the accomplishment of an essential capability and no work-around solution is known, or

d. Adversely affect technical, cost, or schedule risks to the project or to life-cycle support of the system, and no work-around solution is known.

16. For software qualification testing (SQT), a Statement of Functionality that describes the software capability has been provided to COMOPTEVFOR and CNO (N091). For programs to be tested by MCOTEA, the SQT Statement of Functionality has been provided to Director, MCOTEA, and MCTSSA.

17. For aircraft programs, there are no unresolved NAVAIRSYSCOM deficiencies that affect:

a. Airworthiness,

b. Capability to accomplish the primary or secondary mission(s),

c. Safety of the aircrew/operator/maintainer,

d. Integrity of the system or an essential subsystem,

e. Effectiveness of the operator or an essential subsystem.

18. For programs with interoperability requirements (e.g., information exchange requirements in ICD/CDD/CPDs), appropriate authority has approved the ISP and JITC concurs that program interoperability demonstrated in development has progressed sufficiently for the phase of OT to be conducted.

19. Approval of spectrum certification compliance and spectrum supportability has been obtained.

20. For IT systems, including NSS, the system has been assigned a MAC and Confidentiality Level. System certification accreditation documents, including the SSAA and the Authority to Operate (ATO) or Interim Authority to Operate (IATO), have been provided to the OTA.

5.6.2 Navy Procedures for Certification

The SYSCOM Commander/Program Executive Officer (PEO)/ Direct Reporting Program Manager (DRPM)/PM shall convene an OTRR prior to certifying readiness for OT&E (including early operational assessment (EOA), OA, IOT&E/OPEVAL, SQT, and FOT&E). The OTRR shall consist of all members of the testing team (DT&E and OT&E) including representatives from CNO (N091), the program sponsor, Assistant Secretary of the Navy (Research, Development and Acquisition) (ASN(RD&A)) Chief Engineer (CHENG), and COMOPTEVFOR.

The SYSCOM Commander/PEO/DRPM shall evaluate and make a determination that a system is ready for OT&E after completing DT&E and COMOPTEVFOR distribution of the OT&E test plan (normally 30 days prior to OT&E). The SYSCOM Commander/PEO/DRPM shall, unless otherwise directed by ASN(RD&A) for programs on the OSD T&E Oversight List, make one of the following certifications.

5.6.2.1 Certification for OT Without T&E Exceptions

Certify to COMOPTEVFOR by message that a system is ready for OT_____(phase), as required by the TEMP, without deferrals or waivers. Provide information copies to CNO (N091), the program sponsor, ASN(RD&A) CHENG, fleet commands, INSURV for ships, NTAB for aircraft, other interested commands, and when a program is on

the OSD T&E Oversight List, to DOT&E. See this enclosure, paragraph 5.6.4 for explanation of exceptions.

5.6.2.2 Certification for OT With T&E Exceptions

Certify to CNO (N091) by message that a system is ready for OT_____(phase), as required by the TEMP, with waiver and/or deferral requests. Provide information copies to the program sponsor (who must provide formal concurrence with proposed exceptions), ASN(RD&A) CHENG, COMOPTEVFOR, and when a program is on the OSD T&E Oversight List, to DOT&E.

5.6.3 Marine Corps Procedures for Certification

Approximately 30 days prior to the start of an OT&E, an OTRR will be chaired and conducted by the Director, MCOTEA. OTRR participants shall include the OT&E Test Director and Assistant Test Director, representatives from the PM, ASN(RD&A) (for ACAT I and II programs), MARCORSYSCOM Assistant Commander, Programs and Chief Engineer, and Marine Corps Combat Development Command (MCCDC) (C441). The purpose of the OTRR is to determine the readiness of a system, support packages, instrumentation, test planning, and test participants to support the OT. It shall identify any problems which may impact the start or proper execution of the OT, and make any required changes to test plans, resources, training, or equipment.

CG, MARCORSYSCOM or Deputy Commander shall, unless otherwise directed by ASN(RD&A) for programs on the OSD T&E Oversight List, certify to the Director, MCOTEA, that the system is safe and ready for operational testing. This certification includes an information copy for MCCDC (C441).

Director, MCOTEA, shall select OTRR agenda issues based on a review of DT&E results and related program documentation, including certification of equipment to be safe and ready for OT&E. MCOTEA shall also review all OT&E planning for discussion at the OTRR. OTRR agenda items may be nominated by any OTRR attendee.

5.6.4 Navy T&E Exceptions

There are two types of T&E exceptions to the certification for OT.

5.6.4.1 Waivers

The term "Waivers" applies to a deviation from the criteria identified for certification in paragraph 5.6.1 of this instruction. Waivers do not change or delay any testing or evaluation of a system.

5.6.4.2 Deferrals

The term "Deferrals" applies to a delay in testing requirements directed by the TEMP. A deferral moves a testing requirement from one test period to a later period. Deferred items cannot be used in the analysis to resolve COIs; however, the OTA may comment on operational considerations in the appropriate sections of the test report. A deferral does not change the requirement to test a system capability, function, or mission, only the timeframe in which it is evaluated.

5.6.4.2.1 When Deferrals are Appropriate

Deferrals will not normally be granted for EOAs, OAs, or any OT&E prior to IOT&E. Performance shortfalls should be identified sufficiently early to document system capability maturity in the appropriate CDD, CPD, and TEMP. When unanticipated problems with system maturity or test resources would unduly delay an OT period, deferrals provide for continued testing and efficient use of scheduled resources (e.g., ranges, operational units, and assets.

5.6.4.2.2 Limitations to Test

A deferral may result in limitations to the scope of testing that may preclude COMOPTEVFOR from fully resolving all COIs.

5.6.4.3 CNO (N091) Approval of a Deferral Request

Deferrals for OT&E periods may only be granted after the program and resource sponsors have justified that the system is necessary and useful, and adds capability to the fleet despite deviating from testing of a particular TEMP requirement. COMOPTEVFOR will then make a determination on adequacy of the test and a recommendation to conduct or delay testing because of deferral requests. The necessary programmatic inputs or changes to account for required additional test periods in which the deferred items are to be tested must be approved by the resource sponsor and official concurrence relayed to CNO (N091). For programs on the OSD T&E Oversight List, the deferral(s) must be coordinated with DOT&E prior to CNO (N091) approval. Approval of deferral requests does not alter the associated requirement and approved deferrals shall be tested in subsequent operational testing.

5.6.5 Navy Waiver and Deferral Requests

Waivers and deferrals shall be requested in the OT&E certification message. If a waiver or deferral request is anticipated, the PM shall coordinate with the program sponsor, CNO (N912), and COMOPTEVFOR prior to the OTRR or similar review forum. Deferrals shall be identified as early as possible, normally no later than 30 days prior to OTRR. Use of the T&E WIPT or similar forum is also recommended to ensure full understanding of the impact on operational testing.

When requesting a waiver or deferral, the PM shall outline the limitations that the deferral or waiver will place upon the system under test, and their potential impacts on fleet use. Further, a statement shall be made in the OT&E certification message noting when approved deferrals will be available for subsequent OT.

5.6.6 Marine Corps Waivers

If full compliance with the certification criteria is not achieved, but the deviations are minor, MARCORSYSCOM shall request in the certification correspondence that DC,CD (C441) grant a waiver to allow OT to begin. Justification shall be provided for the waivers. DAs/PMs shall make every attempt to meet all of the readiness criteria before certification. If the need for a waiver is anticipated, the PM shall identify the waiver to MARCORSYSCOM (Chief Engineer) when establishing the schedule for the OTRR. Waivers shall be fully documented prior to the OTRR.

5.7 OT&E

5.7.1 Independent OT&E

Reference (b) requires an independent organization, separate from the DA and from the user commands, be responsible for all OT&E. OT&E shall be conducted by the OTA (COMOPTEVFOR or Director, MCOTEA) or an agent designated by the OTA for ACAT I, IA, II, III, and IVT programs. COMOPTEVFOR and the Director, MCOTEA are responsible for planning and conducting OT&E, reporting results, providing evaluations of each tested system's operational effectiveness and suitability, and identifying system deficiencies. Additionally, COMOPTEVFOR is responsible for providing inputs to tactics, as appropriate, and making recommendations regarding fleet introduction. OT shall determine whether thresholds in the CDD/CPD have been satisfied. See reference (b), enclosure 5, for implementation requirements for all DON ACAT programs requiring OT&E.

5.7.1.1 Navy Start of OT&E

COMOPTEVFOR may commence operational testing upon receipt of a certification message unless waivers or deferrals are requested. When waivers or deferrals are requested, COMOPTEVFOR may start testing upon receipt of waiver or deferral approval from CNO (N091). COMOPTEVFOR shall issue a start test message when OT begins.

5.7.1.2 Navy De-certification and Re-certification for OT&E

When evaluation of issued deficiency/anomaly reports or other information indicates the system will not successfully

complete OT&E, de-certification may be originated by the SYSCOM Commander/PEO/DRPM, after coordination with the program sponsor and PM, to withdraw the system certification and stop the operational test. Withdrawal of certification shall be accomplished by message to CNO (N091) and COMOPTEVFOR stating, if known, when the system will be evaluated for subsequent certification and restart of testing. When a system undergoing OT&E has been de-certified for OT, the SYSCOM Commander/PEO/DRPM must re-certify readiness for OT&E prior to restart of OT in accordance with paragraph 5.6.2.

5.7.2 OT&E Plans

See reference (b), enclosure 5, for implementation requirements for all DON ACAT programs requiring OT&E. ACAT I, II, and programs on the OSD T&E Oversight List require DOT&E approval.

5.7.3 OT for Configuration Changes

The DA shall ensure that T&E planning includes OT&E for significant configuration changes or modifications to the system. These OT&E events are necessary for the OTA to substantiate a fleet release/introduction recommendation to the CNO/CMC for all systems.

5.7.4 OT for Information Assurance and System Security Certification and Accreditation

All weapon, C4ISR, and information programs that are dependent on external information sources, or that provide information to other DoD systems, shall be tested and evaluated for information assurance (IA) (reference (b)). Systems shall incorporate IA controls identified in reference (e), based upon the objective of MAC and Confidentiality Level. The OTA shall operationally test and evaluate IA controls (i.e. people, technology, and operations) to the level of robustness specified by the objective of the MAC and Confidentiality Level against DIA/ONI validated IA threats per reference (c). IA controls should be evaluated for adequacy and tested for compliance. Evaluation of the FoS in which the subject system operates should be minimized to the scope necessary to resolve COIs for the subject system.

5.7.5 Quick Reaction Assessment (QRA)

When an urgent operational need is identified for a system in development or when a system has been granted Rapid Deployment Capability (RDC) status (as defined in enclosure (2), paragraph 2.8) by ASN(RDA), it may be necessary to modify the established OT process to rapidly deliver that capability to the fleet. In such cases, the program sponsor may obtain an OTA assessment of operational effectiveness, suitability, and considerations for deploying the system. Navy program sponsors may request a QRA

from CNO (N091). USMC program sponsors may request a QRA from Director, MCOTEA. When approved, COMOPTEVFOR or Director, MCOTEA should conduct the assessment and issue a report as soon as possible. The following information should be included in the QRA request:

1. The purpose of the assessment and, specifically, what system attributes the program sponsor wants assessed.

2. The length of time available for the assessment.

3. The resources available for the assessment.

4. Which forces will deploy with the system prior to IOC.

QRAs do not obviate or replace scheduled OT in an approved TEMP for programs of record. Systems in RDC status that have completed QRA will normally undergo formal OT when they transition to program status.

5.7.6 OT&E Information Promulgation

See reference (b), enclosure 5, and this enclosure, paragraph 5.11, T&E Reports, for implementation requirements for all DON ACAT programs requiring OT&E.

5.7.6.1 MDA Briefing

See reference (b), enclosure 5, for implementation requirements for DON ACAT I and IA programs and programs on the OSD T&E Oversight List. The OTA will brief the results of program OTs at MDA decision meetings.

5.7.7 Use of Contractors in Support of OT&E

See reference (b), enclosure 5, for implementation requirements for all DON ACAT programs requiring OT&E.

5.7.8 Visitors

During operational testing, observers and other visitors are authorized at the discretion of COMOPTEVFOR, or Director, MCOTEA, as appropriate.

5.8 Annual OSD T&E Oversight List

The annual OSD T&E Oversight List identifies those DON programs subject to OSD T&E oversight. ACAT I, II, and programs requiring LFT&E are generally included in oversight. Other programs that generate Congressional, public, or special interests are routinely included in the listing. DON T&E information related to programs on the OSD T&E Oversight List will be coordinated through CNO (N091) for Navy programs. PMs for USMC programs subject to OSD T&E oversight will coordinate DT

information, and Director, MCOTEA, will coordinate OT information.

5.9 Live Fire Test and Evaluation (LFT&E)*

The DA is responsible for LFT&E strategy development, associated TEMP input, monitoring, and supporting the conduct of LFT&E. Per reference (b), DOT&E shall approve the LFT&E strategy for programs covered by statute prior to the decision to enter into System Development and Demonstration (normally Milestone B).

Per 10 USC 2366, realistic survivability and lethality testing shall be completed, the report submitted, and results considered, prior to making a beyond LRIP decision.

Survivability and lethality tests required by statute must be completed early enough in System Development and Demonstration phase to allow correction of any design deficiency before proceeding beyond LRIP.

LFT&E events deemed necessary prior to Milestone B may be conducted under a stand-alone plan (in lieu of an approved TEMP). The intention of this policy is to facilitate agreement between developers and oversight agencies. This stand-alone plan for pre-Milestone B LFT&E events will follow the same approval process as prescribed for a TEMP. The stand-alone plan should be limited in scope and address only objectives of the pre-Milestone B LFT&E events. Subsequently, the stand-alone plan should be integrated into the TEMP.

Each program increment or modification requires a review for LFT&E requirements. If such requirements are found to exist, they must be addressed through the TEMP process.

See reference (b), enclosure 5, for implementation requirements for a program that is a covered major system, a major munitions program, a missile program, or a product improvement (modification) thereto. A covered major system means a vehicle, weapon platform, or conventional weapon system that provides some degree of protection to users in combat and is a major system per 10 USC 2302(5). A major munitions program means a program that is planning to acquire more than a million rounds or is a conventional munitions program that is a major system.

*Not applicable to ACAT IA programs.

5.10 Comparative Testing

5.10.1 Programs Defined by Statute

10 USC 2350a(g) and 2359b establish two programs: the Foreign Comparative Testing (FCT) Program and the Defense Acquisition Challenge Program (DACP). The FCT program tests allied or friendly nations' defense equipment, munitions, and

technologies to see if they can satisfy DoD needs. DACP allows non-DoD entities to propose technologies, products, or processes to existing DoD acquisition programs. At the OSD level, both FCT and DACP are managed by the Comparative Testing Office (CTO) (http://www.acq.osd.mil/cto/organization.htm) under USD (AT&L/DDRE/DUSD(AS&L)).

5.10.2 Navy Management of Comparative Testing

1. For FCT: Navy International Programs Office (Navy IPO) (https://www.nipo.navy.mil/)

2. For DACP: Office of Naval Research (ONR), Code 36, DACP Office

(Note: As of the date of this publication, Navy management of DACP is under review and may change.)

5.10.3 DA Comparative Test Responsibilities

DAs shall follow comparative testing guidance provided by OSD (CTO) and the Navy points of contact cited above. Where comparative testing is a major portion of an acquisition program, it should be included in the TEMP. Comparative testing derived components of an acquisition program shall be treated like contractor Non-Developmental Items (NDI). Acquisition programs, that include comparative testing derived items, are not exempt from DT, OT, or LFT&E provisions of this instruction. Reference (b), enclosure 5, provides DoD direction on comparative test programs.

5.11 Test and Evaluation Reporting

This paragraph describes mandatory T&E reporting requirements for DON ACAT programs as indicated in subsequent paragraphs. Per reference (b), enclosure 5, section 5.4.8, DOT&E and the Deputy Director for DT&E/Office of Defense Systems (DS) in the Office of the USD (AT&L) shall have full and timely access to all available developmental, operational, and live-fire T&E data and reports. The Defense Technical Information Center (DTIC) provides distribution guidance.

5.11.1 DoD Component (DON) Reporting of Test Results

See reference (b), enclosure 5, for implementation requirements for DON ACAT I, selected ACAT IAM, and other ACAT programs designated for OSD T&E oversight.

5.11.1.1 DT&E Reports

For programs on the OSD T&E Oversight List subject to DOT&E oversight, the DA shall provide copies of formal DT&E reports to the Deputy Director, DT&E in the Office of Defense

Systems (ODS) in the Office of the Under Secretary of Defense (Acquisition, Technology and Logistics)(OUSD(AT&L)) and COMOPTEVFOR/Director, MCOTEA at a pre-agreed timeframe prior to program decision point reviews. Copies of DT&E reports for all ACAT I programs shall be provided to the Defense Technical Information Center (DTIC) with the Report Documentation Page (SF 298). Copies of Navy internal DT&E event reports shall be forwarded to CNO (N091), the Deputy Director, DT&E in ODS in OUSD(AT&L), and ASN(RD&A) CHENG. Unless otherwise coordinated, DT&E reports shall be provided to the OTA at least 30 days prior to start of OT. See reference (o) for distribution statements required on technical publications and reference (p) for amplifying information on the Navy Scientific and Technical Information program reporting requirements.

5.11.1.2 Navy OT&E Reports

COMOPTEVFOR shall issue operational test reports for ACAT I and IA programs within 90 days following completion of testing. All other operational test reports are due within 60 days of test completion. Programs subject to OSD T&E oversight shall provide copies of formal OT&E reports to DOT&E in accordance with pre-agreed timeframe prior to program decision reviews. When scheduling a FRP DR, schedulers shall consult DOT&E as to time required to prepare and submit the beyond LRIP report. Copies of OT&E reports for all ACAT I programs, except those which contain vulnerabilities and limitations data for key war-fighting systems, shall be provided to the DTIC with the Report Documentation Page (SF 298). For OSD oversight program T&E events, as defined in the TEMP, copies of Navy OT&E reports shall be forwarded via CNO (N091) to DOT&E and ASN(RD&A) CHENG. See reference (o) for distribution statements required on technical publications and reference (p) for amplifying information on the Navy Scientific and Technical Information program reporting requirements.

5.11.1.3 Marine Corps Operational Test Reports (TRs)

After OT, the Fleet Marine Force (FMF) shall write the Test Director test report. The TR shall address the collection, organization, and processing of information derived from the OT and is a key source of information from which the independent evaluation report (IER) is written. The report also documents the overall potential of the system to meet operational effectiveness and suitability thresholds. The TR shall be forwarded via the appropriate Marine Force, to arrive at MCOTEA no more than 30 days after the end of the test. The PM does not have a role in developing or reviewing the TR. TRs that will be used to support acquisition activities such as "Down Selects" shall be marked "For Official Use Only" (FOUO) by the Director, MCOTEA and handled appropriately.

Once approved, MCOTEA shall distribute it to the MDA, PM, FMF, ASN(RD&A) CHENG, and others concerned including DOT&E for

ACAT I, selected ACAT IAM, and other OSD T&E oversight programs. Release of the observed test results prior to completion of analysis is as deemed appropriate by the Director, MCOTEA.

The results of EOAs and OAs shall be reported directly to the PM. The time and format for these assessment reports shall be determined by MCOTEA and the PM.

5.11.2 LFT&E Report for FRP DR*

For programs involving covered major systems, major munitions or missiles, or product improvements (modifications) thereto, the DA shall submit a LFT&E report to DOT&E, via CNO (N091) or Director, MCOTEA, as appropriate. The submission shall allow DOT&E sufficient time to prepare an independent assessment and submit it to Congress prior to the program proceeding into FRP. PMs shall keep CNO (N091) apprised of the program's LFT&E progress and execution. See reference (b), enclosure 5, for implementation requirements for programs subject to LFT&E statutes.

*Not applicable to ACAT IA programs.

5.11.2.1 LFT&E Waivers*

Request to waive full-up system-level live fire survivability and lethality testing must be submitted by USD(AT&L) for ACAT ID programs or ASN(RD&A) for ACAT IC programs and below and approved by DOT&E prior to entry into System Development and Demonstration. Waiver requests not approved prior to System Development and Demonstration require Congressional relief granted to SECDEF on a case-by-case basis. Waivers shall be coordinated with the program sponsor and CNO (N091) or Director, MCOTEA, as appropriate. Programs seeking LFT&E waivers must provide an alternate LFT&E strategy and plan that are acceptable to DOT&E.

*Not applicable to ACAT IA programs.

5.11.3 Beyond-Low Rate Initial Production (LRIP) Report

ACAT I and IA programs and programs on the OSD T&E Oversight List designated by DOT&E, shall not proceed beyond LRIP until DOT&E has submitted a written report to the Secretary of Defense and the Congress as required by 10 U.S.C. 2399. See reference (b), enclosure 5, for the beyond LRIP report for designated OSD T&E oversight programs.

5.11.4 DOT&E Annual Report

DOT&E prepares an annual report of programs subject to operational test and evaluation on the OSD T&E Oversight List and all programs covered by live fire test and evaluation during the

preceding fiscal year. The report covers basic program description, test and evaluation activity, and provides the Director's assessment of the T&E. CNO (N912) coordinates efforts to review and validate factual information to support DOT&E requests in the development of the report. DON acquisition and test agencies may be tasked by CNO (N912) to assist in this effort.

5.11.5 Foreign Comparative Test Notification and Report to Congress*

The Deputy Under Secretary of Defense Advanced Systems and Concepts (DUSD (AS&C)) shall notify Congress a minimum of 30 days prior to the commitment of funds for initiation of new foreign comparative test evaluations. See reference (b), enclosure 5, for implementation requirements for DON ACAT programs involved in foreign comparative testing.

*Not applicable to ACAT IA programs.

5.11.6 Electronic Warfare (EW) T&E Report

See reference (b), enclosure 3, for implementation requirements for designated DON EW programs.

Chapter 6
Resource Estimation

References: (a) DoD Instruction 5000.2, "Operation of the Defense Acquisition System," 12 May 03 (NOTAL)
(b) SECNAVINST 5420.188E, "Acquisition Category (ACAT) Program Decision Process," 11 Dec 97 (NOTAL)
(c) USD(P&R) Memorandum, "Interim Policy and Procedures for Strategic Manpower Planning and Development of Manpower Estimates," 10 Dec 03 (NOTAL)

6.1 Resource Estimates

See reference (a), enclosure 6, for implementation requirements for all Department of the Navy (DON) acquisition category (ACAT) programs.

6.1.1 Life-Cycle Cost Estimates

DON policy for conducting independent cost estimates (ICEs) of the life-cycle cost of major defense acquisition programs (MDAPs) and major automated information systems (MAISs) is summarized in this instruction, paragraph 7h.

The Naval Cost Analysis Division (NCAD), Office of Budget, Assistant Secretary of the Navy (Financial Management and Comptroller) (ASN(FM&C)), shall chair a Navy Cost Analysis Improvement Group (CAIG) review of program office and independent life-cycle cost estimates to support major milestone decisions for those programs listed in this instruction, paragraph 7h. Formal presentations of estimates will be made to the Director, NCAD. Differences in estimates will be noted, explained, and documented in a memorandum from NCAD to ASN(RD&A).

NCAD will not conduct ICEs on ACAT II, III, or IV programs unless specifically directed to do so by ASN(FM&C) or requested by ASN(RD&A). Systems Command's cost estimating organizations may conduct ICEs for ACAT II, III, and IV programs when required by the MDA.

6.1.2 Cost Analysis Requirements Description (CARD)

A CARD shall be prepared for ACAT I and IA programs prior to preparation of the ICE and the program life-cycle cost estimate. See reference (a), enclosure 6, for implementation requirements for DON ACAT I and IA programs.

6.1.3 Manpower Estimates*

Manpower estimates are required by statute for ACAT I programs. Manpower estimates shall also be developed for other ACAT programs that are manpower significant at the request of the Component manpower authority per reference (c). DON CNO (N12) and CMC (Deputy Commandant, Manpower and Reserve Affairs (DC,M&RA)) are the designated Navy and Marine Corps Component manpower authority, respectively. For ACAT ID programs, CNO (N12)/CMC (DC,M&RA) shall forward approved manpower estimates to the office of the Under Secretary of Defense (Personnel and Readiness). Additional policy and guidance on the development of manpower estimates (including required submission timeline, content/format, and use of manpower estimates) is provided in reference (c).

*Not applicable to ACAT IA programs.

6.2 Affordability

No acquisition program shall be approved to proceed beyond program initiation unless sufficient resources, including manpower and training, are programmed in the most recently approved Future Years Defense Program (FYDP), or written assurance is given that it will be programmed in the Planning, Programming, Budgeting, and Execution System (PPBES) cycle. Program affordability analysis, including life-cycle costs, shall be assessed and reported at each program decision point. See reference (a), paragraph 3.7.2.6, for implementation requirements for all DON ACAT programs.

Full funding to support approved ACAT programs shall be included in each program's budget submission. Full funding shall include costs associated with interfaces with other programs. Full funding in this regard means annual submission of financial requirements by the program manager (PM) for total program costs. CNO/CMC shall ensure funding requirements for ACAT programs, abbreviated acquisition programs, non-acquisition programs, and rapid deployment capability programs are satisfied in the development of each PPBES phase.

FYDP or budgeted funding shall be shown at each program decision point (except Milestone A) or other program review.

If the MDA selects an alternative which exceeds FYDP or budgeted resources, then the need for additional resources shall be identified to CNO (N8)/CMC (DC,P&R). CNO (N8)/CMC (DC,P&R) shall forward the recommended resource action to Secretary of the Navy (SECNAV), ASN(RD&A), or MDA, as appropriate, with a copy to ASN(RD&A)(if not the MDA) and ASN(FM&C) prior to formal acquisition decision memorandum approval to proceed with the restructured program. SECNAV, ASN(RD&A), or the MDA, as appropriate, shall direct appropriate action.

6.3 Contract Management Reports

The reports prescribed in this section shall be used for all applicable defense contracts as they aid in effective resource management. Use of electronic data interchange shall be required provided that such media are suitable for management use. The work breakdown structure (WBS) used in preparing reports covered by this section should conform to the standard DOD WBS (see MIL-HDBK-881).

6.3.1 Contractor Cost Data Reporting (CCDR) for Hardware and Software and Software Resources Data Report (SRDR)

CCDRs are mandatory for all ACAT ID and IC programs. SRDRs are mandatory for ACAT ID, IC, IAM, and IAC programs. The OSD CAIG is the approval authority for CCDR and SRDR plans for these programs. NCAD will assist the CAIG in reviewing these plans for ACAT IC, IAM, and IAC programs.

CCDRs and SRDRs are discretionary for ACAT II, III, and IV programs. Copies of CCDRs and SRDRs shall be provided to Office of the Secretary of Defense's (OSD's) Defense Cost and Resource Center.

See reference (a), enclosure 6, paragraph E6.3, and this instruction, enclosure (3), Table E3T3, for implementation requirements for ACAT I and IA programs.

6.3.2 Cost Performance Report (CPR) -- (DID DI-MGMT-81466)

PMs shall use the following guidelines in developing CPR reporting requirements:

1. Tailor CPR requirements.

2. Limit reporting detail to level 3 of the contract WBS.

3. Format 2 of the CPR shall normally reflect the contractor's organizational structure.

4. Variance analysis reporting in format 5 of the CPR shall be on an exception basis.

5. Copies of all CPRs shall be provided to OSD's Defense Cost and Resource Center.

6.4 Analysis of Alternatives (AoA)

6.4.1 Weapon System AoA

The cognizant Program Executive Officer (PEO)/Systems Command (SYSCOM) Commander/Direct Reporting Program Manager (DRPM), or ASN(RD&A), and Chief of Naval Operations (CNO)/Commandant of the Marine Corps (CMC), but not the PM, shall have overall responsibility for the analysis of alternatives.

The CNO/CMC, or designee, shall propose an AoA Plan in coordination with an AoA integrated product team (IPT), under the overall guidance of the acquisition coordination team (ACT) where established (see reference (b)). All AoAs shall include analysis of doctrine, organization, training, materiel, management, leadership, personnel, and facilities (DOTMLPF) and joint implications. Common systems shall be included as one of the alternatives when one may provide the needed capability. A director shall be assigned to conduct each AoA. The AoA Plan shall be approved at Concept Decision, which begins the Concept Refinement phase, by: ASN(RD&A) or designee and CNO (N70 and N81)/CMC (Commanding General, Marine Corps Combat Development Command (CG, MCCDC)) for ACAT ID programs; MDA or designee and CNO (N70 and N81)/CMC (CG, MCCDC) for ACAT IC, II, and III programs; and MDA and CNO (N70 and N81)/CMC (CG, MCCDC) for ACAT IV programs.

6.4.2 IT AoA

All IT AoAs shall analyze DOTMLPF implications. Process redesign shall be considered in the analysis of alternatives as a key factor that impacts both the cost and effectiveness of each alternative evaluated. Total ownership cost thresholds and objectives in the CDD/CPD may reflect reduced costs associated with process redesign.

6.5 Cost as an Independent Variable (CAIV)

The CAIV concept shall be applied to all DON ACAT programs as described in the Defense Acquisition Guidebook.

6.5.1 Cost/Schedule/Performance Trade-Offs

For DON ACAT IC, IAC, and II programs, an ACT shall be used to provide cost-performance tradeoff analysis support, as appropriate. Cost-performance tradeoffs shall also be performed for ACAT III and IV programs and an ACT, if established, shall provide tradeoff support as approved by the MDA.

Chapter 7
Systems Engineering and Human Systems Integration

References:
(a) DoD Directive 5000.1, "The Defense Acquisition System," 12 May 03 (NOTAL)
(b) DoD Instruction 5000.2, "Operation of the Defense Acquisition System," 12 May 03 (NOTAL)
(c) SECNAVINST 3960.6, "Department of the Navy Policy and Responsibility for Test, Measurement, Monitoring, Diagnostic Equipment and Systems, and Metrology and Calibration (METCAL)," 12 Oct 90 (NOTAL)
(d) ISO 9001 "Quality Management Systems - Requirements" (NOTAL)
(e) USD(A&T) Memorandum, "Single Process Initiative," 8 Dec 95 (NOTAL)
(f) Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01D, "Joint Capabilities Integration and Development System," 12 Mar 04 (NOTAL)
(g) Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3170.01A, "Operation of the Joint Capabilities Integration and Development System," 12 Mar 04 (NOTAL)
(h) MCO 3093.1C, "Intraoperability and Interoperability of Marine Corps Tactical C4I2 Systems," 15 Jun 89 (NOTAL)
(i) SECNAVINST 5000.36, "Department of the Navy Data Management and Interoperability," 1 Nov 01 (NOTAL)
(j) ASN(RD&A) Report, "DON Implementation Plan for the DoD Joint Technical Architecture (JTA)," 21 Jul 99 (NOTAL)
(k) OPNAVINST 9070.1, "Survivability Policy for Surface Ships of the U.S. Navy," 23 Sep 88 (NOTAL)
(l) Assistant Secretary of the Navy (Research, Development and Acquisition) Memorandum, "DON Policy on Digital Logistics Technical Data," 2 Nov 99 (NOTAL)
(m) Office of Management and Budget (OMB) Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment," 10 Feb 98 (NOTAL)
(n) OPNAVINST 3960.16, "Navy Test and Monitoring Systems (TAMS)," 18 Jan 95 (NOTAL)
(o) CJCSI 3901.01A, "Requirements For Geospatial Information and Services," 26 Jul 99 (NOTAL)
(p) SECNAVINST 5430.79B, "Naval Oceanography Policy, Relationships and Responsibilities," 14 Jul 86 (NOTAL)
(q) OPNAVINST 2450.2, "Electromagnetic Compatibility Program Within the Department of the Navy," 8

Jan 90 (NOTAL)
(r) MCO 2410.2B, "Electromagnetic Environmental Effects (E3) Control Program," 12 Mar 97 (NOTAL)
(s) OPNAVINST 9640.1A, "Shipboard Habitability Program," 3 Sep 96 (NOTAL)
(t) SECNAVINST 5100.10H, "Department of the Navy Policy for Safety, Mishap Prevention, Occupational Health and Fire Protection Programs," 15 Jun 99 (NOTAL)
(u) SECNAVINST 5420.188E, "Acquisition Category (ACAT) Program Decision Process," 11 Dec 97 (NOTAL)
(v) Military Standard (MIL-STD) 882D, "Standard Practice for System Safety," 10 Feb 00 (NOTAL)
(w) 32 CFR 775, "Procedures For Implementing The National Environmental Policy Act," (NOTAL)
(x) Assistant Secretary of the Navy (Installations and Environment) Memorandum 99-01, "Requirements for Environmental Considerations in Test Site Selection," 11 May 99 (NOTAL)
(y) National Aerospace Standard (NAS) 411, "Hazardous Materials Management Program," 29 Apr 94 (NOTAL)
(z) NAVSEAINST 8020.6D, "Navy Weapon System Safety Program," 15 Jan 97 (NOTAL)
(aa) DoD 4140.1-R, "DoD Supply Chain Material Management Regulation," 23 May 03 (NOTAL)
(ab) Public Law 108-136, "National Defense Authorization Act for Fiscal Year 2004, Section 802, Quality Control In Procurement Of Aviation Critical Safety Items And Related Services," 24 Nov 03 (NOTAL)

7.1 Systems Engineering

The program manager (PM) is accountable for accomplishing program objectives for total life-cycle systems management, including sustainment (total systems approach, per references (a) and (b)). PMs shall employ systems engineering as a mechanism to achieve the program objectives of optimal total system performance and minimal total ownership cost (TOC). PMs shall employ a comprehensive, structured, integrated and disciplined systems engineering approach to the life-cycle design of weapons, information technology, and support systems. Systems engineering focuses on defining user needs and required functionality early in the development cycle, documenting requirements, then proceeding with design synthesis and system validation to achieve the total capability. It includes the hardware, software and human operators, maintainers and support personnel. It also focuses on individual systems and includes system of systems (SoS) and/or family of systems (FoS) considerations.

PMs shall ensure development activities implement the

procedures necessary to concurrently design products and their associated implementing processes to ensure product and process development integration. Development efforts shall result in an optimal product design along with its associated manufacturing, test, and support processes needed to meet the user's needs to achieve life-cycle system cost and performance objectives.

PMs shall use a systems engineering process to translate operational requirements/capability needs into a system solution that includes the design, human systems integration (HSI), test, manufacturing and support processes and products. The system engineering process shall be documented in a Systems Engineering Plan describing how this process relates to the overall program, how the technical baseline will be managed, and how technical reviews will be used as a means to ascertaining program technical risk.

The subject areas in this enclosure shall be part of the systems engineering process and their impact on the development and production of the product design shall be determined with respect to total system cost, schedule, performance (including human performance), and technical risk (including interoperability and integration). PMs shall provide for independent technical review and independent technical risk assessment of programs.

7.1.1 Manufacturing and Production

Manufacturing and production planning considerations shall be identified early in the acquisition and design processes to identify key product and process characteristics and to ensure that validated process controls are implemented prior to production. This planning should include issues such as long-lead material, unique processes, tooling, parts and material obsolescence, and calibration per reference (c).

7.1.2 Quality

Reference (d) is the preferred model for quality management systems. Contractors may propose alternative systems, as long as they are technically acceptable and accomplish program objectives. The use of advanced quality practices and quality requirements shall be considered, if necessary, to assist in reducing risk, assuring quality, and controlling costs.

For existing contracts, the procedures set forth in reference (e) shall be applied to all Navy contractors proposing a transition from MIL-Q-9858 to the International Organization for Standardization (ISO) 9001, or equivalent.

7.1.3 Acquisition Logistics

The PM shall plan, manage, and execute acquisition logistics. The resource sponsor shall ensure adequate funding

for acquisition logistics support. The logistics support strategy shall be assessed, developed, and integrated concurrent with the capability to ensure that short-term logistics support will be in-place at system initial operational capability (IOC). Logistics support shall be sufficient, starting at IOC, to sustain operations to capability development/production document (i.e., Capability Development Document (CDD)/Capability Production Document (CPD) per reference (f) and (g)) specified levels of performance and affordability. Long-term logistics support shall be in place at system full operational capability (FOC) to maximize readiness and minimize life-cycle cost. Particular emphasis shall be applied to mitigation of the occurrence of parts and material obsolescence events. Acquisition logistics planning, for each increment of development, shall indicate resources needed to execute; in terms of both the amount and the source for resources.

7.1.4 Open Systems Approach

Open systems approach shall be applied as an integrated technical approach and is intended to be used for all systems, including support systems.

7.1.5 Reliability, Availability, and Maintainability (RAM)

Quantitative RAM performance requirements (e.g., CDD/CPD per references (f) and (g)), along with supporting design analyses and tests (e.g. design reference mission profile, built-in-test, failure analysis and data collection, etc.), are critical to meeting mission needs and reducing life-cycle ownership costs. User capability needs (CDD/CPD) shall be translated into performance requirements.

Non-developmental items (NDI) or commercial off-the-shelf (COTS) items shall be shown to be operationally suitable for their intended use and capable of meeting their allocated reliability requirements.

7.1.6 Interoperability and Integration

PMs shall ensure the interoperability and integration of all operations, functions, system interfaces, and system definition and design to reflect the requirements for all system elements: hardware, software, facilities, people, and data.

During the Concept Refinement Phase and the Technology Development Phase, interoperability shall be addressed by including SoS or FoS considerations in applicable analyses. If Technology Development activity is carried out, the PM shall ensure that the technologies developed will have no adverse affect on interoperability and integration at the SoS or FoS level. During the System Development and Demonstration phase, the PM shall ensure that interoperability is being maintained.

Reference (h) establishes Marine Corps management procedures to ensure compliance with both intraoperability and joint interoperability standards.

7.1.6.1 IT Design Considerations

As required by reference (i), documentation of database designs is an essential element of improving interoperability.

7.1.6.2 DoD Joint Technical Architecture (JTA)

All acquisition programs shall address interoperability and human systems integration and specify appropriate interoperability requirements. These requirements shall be consistent with DoD policies, standards (e.g., the JTA), and mission area integrated architectures. Program new starts and block upgrades shall comply with Navy JTA Implementation Plan, reference (j), or current version.

For all ACAT I programs, programs whose system(s) are part of a FoS or SoS, and programs designated as special interest by Assistant Secretary of the Navy (Research, Development and Acquisition)(ASN(RD&A)), requirements officers (ROs) and PMs shall coordinate with ASN(RD&A) Chief Engineer (CHENG) to ensure JTA compliance with reference (j).

7.1.6.3 Interoperability and Integration Support

ASN(RD&A) CHENG shall support PMs in resolving interoperability and integration issues and shall advise ASN(RD&A) on all matters relating to interoperability and integration including JTA compliance.

7.1.7 Survivability

When developing survivability characteristics for critical weapon systems, PMs shall address all aspects of survivability including the effects of nuclear, chemical, and biological contamination and shall consider such effects in test and resource planning. Program Executive Officers (PEOs), Systems Command (SYSCOM) Commanders, Direct Reporting Program Managers (DRPMs), and PMs shall coordinate with the Joint Program Executive Office For Chemical Biological Defense (JEPO CBD), where appropriate. The survivability standards in reference (k) shall be met for all ship programs.

7.1.8 Shipboard Systems Integration

Ship PMs shall develop a ship system performance specification that ensures integration of all embarked systems and subsystems (including aviation systems) in a manner that ensures established performance and support requirements are satisfied. Close coordination shall be established PMs, PEOs, SYSCOM Commanders, and DRPMs to ensure successful integration of

all systems.

Ship PMs shall facilitate an integrated topside design approach in both ship design and system development.

Ship PMs shall facilitate lower TOC for new and legacy ships.

7.1.9 Performance Specifications

Specifications for the procurement of new systems and subsystems and for the procurement of major modifications or upgrades to existing systems and subsystems shall be written in performance-based terms to the extent practicable. When using performance-based strategies for the acquisition or sustainment of systems, subsystems, and spares, the use of military specifications and standards shall be limited to Government-unique requirements.

See reference (l) for requirements for acquisition of logistics technical data in digital form.

The Director, Naval Nuclear Propulsion Program (CNO (N00N)) shall determine the specifications and standards to be used for naval nuclear propulsion plants per Public Law 98-525 (42 USC, 7158 Note).

An order of preference for selection of specifications and standards shall be included in each contract per reference (m).

7.1.9.1 System Performance for SoS and FoS Programs

ASN(RD&A) shall establish a systems engineering IPT (SE IPT) for an identified Navy or Marine Corps SoS or FoS. ASN (RD&A) CHENG will assist SE IPTs established for SoS or FoS, in systems integration and interoperability performance compliance. The SE IPT shall assess appropriate analysis of alternatives, CDD/CPDs (per references (f) and (g)), and mission capability packages (MCPs) to derive, allocate, and describe and document system performance and interfaces among the ACAT programs and modifications that provide SoS or FoS mission capability. For shipboard equipments, the SE IPT shall make use of the Naval Sea Systems Command integrated topside design (ITD) and ship design process to refine system design performance for effective integration into the platform. System performance shall be documented in a SoS or FoS system performance document (SPD).

7.1.9.2 Standardization and Commonality

References (a) and (b) direct the application of performance based strategies that reduce logistics costs and footprint and facilitate interoperability. Program managers shall establish a process to reduce the proliferation of non-standard parts and equipment within and across system designs.

Non-standard parts are those items not currently in the DoD inventory or not produced in accordance with nationally recognized industry, international, federal, or military standards. The parts management process shall ensure the identification, life-cycle cost-benefit evaluation, and formal approval of proposed non-standard parts during System Development and Demonstration. The process shall include the periodic evaluation of different items having similar capabilities, characteristics, and functions used in existing type, model, series, and class designs to reduce the number of distinct items.

Reference (c) designates the Navy's standard family of automatic test equipment. Reference (n) directs that acquisition of automatic test equipment, other than that designated for use at the intermediate, depot, or factory levels of maintenance, requires a waiver from ASN(RD&A).

7.1.10 Precise Time and Time Interval (PTTI) Support

The Superintendent of the U. S. Naval Observatory (USNO) is designated as the DOD and DON PTTI Manager and shall maintain standard astrogeophysical products. Coordinated Universal Time (UTC) is mandated for the time of day information exchanged among DOD systems.

7.1.11 Geospatial Information and Services (GI&S)

Guidance for identifying and funding unique GI&S products required by a system under development is found in reference (o).

All DON GI&S support requirements will be coordinated with CNO (N096)/CMC, as appropriate.

7.1.12 Natural Environmental Support

Per reference (p), CNO is responsible for coordinating and implementing operational oceanographic, maritime weather, and astrogeophysical support requirements for all DoD users. PMs shall task CNO (N096) for meteorology and oceanography, GI&S, PTTI, and astrometry support as early as possible in the development cycle to ensure timely availability of essential products and services.

7.1.13 Electromagnetic Environmental Effects (E3)

References (q) and (r) provide Navy and Marine Corps guidance, respectively, for E3 management.

7.2 Human Systems Integration (HSI)

The PM shall apply HSI as part of a systems engineering approach. HSI is that aspect of systems engineering and PM's efforts that addresses the extent to which humans will be required to operate, maintain, and support the resultant design,

including analysis to reduce manpower, improve human performance, and minimize personnel risk. HSI is the integrated analysis, design, and assessment over the life-cycle of a system and associated support infrastructure in the domains of manpower, personnel, training (MPT), human factors engineering, personnel survivability, habitability, safety, and occupational health.

7.2.1 HSI in Acquisition

PMs and sponsors shall address HSI throughout all phases of the acquisition process. The PM shall initiate an HSI effort as early in the acquisition process as possible. When modifying a system (e.g., modernization or block upgrade), HSI issues and domains must be considered to ensure that configuration changes do not create new or unforeseen HSI issues. Life-cycle cost projections for capabilities and/or systems shall include direct HSI costs (e.g., manpower, personnel and training), and should discuss indirect costs (e.g., medical benefits resulting from safety and occupational health risks). PMs shall base program planning on realistic projections of future funding and manpower availability.

7.2.2 Manpower, Personnel, and Training (MPT)

Manpower and personnel requirements shall be optimized for the specific system, and incorporate consideration for similar and/or related systems. Individual system and platform manpower and personnel requirements shall be developed in close collaboration with related systems (SoS and FoS) throughout the acquisition process to identify commonalities, merge requirements and avoid duplication. MPT analyses shall be conducted as part of the overall systems engineering process, and aligned with HFE analyses. A manpower estimate report shall be developed for ACAT I programs per 10 USC 2434 and enclosure (6), paragraph 6.1.3. A training system plan (TSP) shall be prepared as a program plan per enclosure (3), paragraphs 3.1 and 3.9.1.

7.2.3 Human Factors Engineering (HFE)

HFE principles (e.g., top down functional analysis and human centered design) shall be applied throughout the acquisition process. The goal is to eliminate redundancy, optimize task allocation and information flow, and ensure an efficient and cost-effective process throughout the system.

7.2.4 Personnel Survivability

Per reference (b), PMs shall place a high priority on the personnel survivability requirements. Personnel survivability requirements strive to reduce the risk of fratricide and personnel detection or targeting, and increase the odds of personnel survival if attacked.

7.2.5 Habitability

The PM shall place a high priority on the habitability requirements. The habitability standards in reference (s) shall be met for all ship programs. Where these standards cannot be achieved, a waiver shall be requested. The resource sponsor with concurrence from CNO (N4) and CNO (N1), or their designee, shall approve waivers. Waivers that affect health and safety must be evaluated via a system safety process in accordance with DoD 5000.2 and evaluated at a management level consistent with the risk.

7.3 Environmental, Safety, and Occupational Health (ESOH)

As part of risk reduction, the PM shall prevent ESOH hazards where possible, and shall manage ESOH hazards where they cannot be avoided. During system design, the PM shall document hazardous materials used in the system and plan for the system's demilitarization and disposal. CNO (N09F) will assist CNO (N1) in the HSI areas of safety and occupational health.

ASN(RD&A) is responsible for ensuring DON science and technology (S&T) projects and acquisition programs comply with DON ESOH policy and is the focal point for all DON S&T and acquisition ESOH issues.

The Assistant Secretary of the Navy (Installations and Environment) (ASN(I&E)) is responsible for formulating DON ESOH policy (reference (t)). ASN(I&E), or designee, as a program decision principal advisor (see reference (u)), will attend program decision meetings (PDMs).

CNO and CMC shall support ASN(RD&A) in developing acquisition ESOH requirements, recommending mandatory acquisition ESOH policy, assisting in ESOH policy implementation, reviewing ESOH related documentation, and providing ESOH advice and assistance to acquisition personnel.

The Chief of the Bureau of Medicine (BUMED) shall support ASN(RD&A) in integrating occupational health considerations into S&T projects and the systems engineering process of acquisition programs.

The Chief of Naval Research (CNR) and PMs shall ensure ESOH risk levels have been identified in S&T projects and acquisition programs, respectively, per the risk management processes of reference (v). Program goals shall incorporate ESOH criteria where regulatory factors may impinge on basing, range use, and deployment options or affect operators' health and safety. The associated risk levels are defined in Table E7T1.

ASN(RD&A); PEOs/SYSCOM Commanders, or Flag-level or senior executive service (SES) designees/DRPMs, CNR; and PMs, are the risk acceptance authorities for high, serious, and medium/low ESOH risks, respectively, as defined in Tables E7T1 and E7T2

(derived from Military Standard (MIL-STD)-882) and by reference (v). Risk acceptance authority may not be delegated below the PM.

Table E7T1 ENVIRONMENTAL, SAFETY, AND OCCUPATIONAL HEALTH HAZARDS DEFINTIONS

SEVERITY LEVELS		PROBABILITY of OCCURRENCE (P)*
Definitions: **Environmental (E) - Hazards in terms of damage to the natural environment. *Dollar values include fines, legal fees, cleanup, restoration, etc.** **Safety (S) - Hazards in terms of equipment/property loss/damage, death/injury *Dollar values include replacement/repair costs.** **Occupational Health (OH) - Hazards in terms of dosage (e.g., concentration vs time) of a substance or induced loads (e.g., heat, cold, shock).**		**Definitions:** **E - Probability of adversely impacting natural environment over the system's life-cycle** **S - Probability of incurring a human loss over the system's life-cycle** **OH - Probability of exposing crew, work force, or public over the system's life-cycle**
Level I	**Catastrophic** E - Irreversible severe damage in violation of law or damage > $1M S - Death, permanent total disabling injury, or loss/damage > $1M OH - Dose of a substance or induced stress levels leading to death or a permanent total disabling illness	**A. Frequent** **Frequency** Fleet of systems: Continuously, P=1 Individual System: Frequently, $10^{-1} < P < 1$
II	**Critical** E - Reversible damage in violation of law or damage > $200K < $1M S - Partial disabling injury, and/or ≥ 3 people hospitalized, equipment/ property loss/damage > $200K < $1M OH - Dose of a substance or induced stress levels leading to permanent partial disabling illness, and/or ≥ 3 people hospitalized	**B. Probable** **Frequency** Fleet of systems: Continuously, $10^{-1} < P < 1$ Individual System: Several times, $10^{-3} < P < 10^{-1}$
III	**Marginal** E - Reversible damage, no violation of law, damage > $10K < $200K S - Non-fatal injury, 1 or more lost work days, equipment/property loss/damage > $10K < $200K OH - Dose of a substance or induced stress levels leading to illness with 1 or more lost work days	**C. Occasional** **Frequency** Fleet of systems: Several times, $10^{-3} < P < 10^{-1}$ Individual System: Sometimes, $10^{-6} < P < 10^{-3}$
IV	**Negligible** E – Minimal damage, no violation of law S - Non-fatal injury, no lost work days, equipment/property loss/damage > $2K < $10K OH - Dose of a substance or induced stress levels with no lost work time and no job impairment	**D. Remote** **Frequency** Fleet of systems: Sometimes, $10^{-6} < P < 10^{-3}$ Individual System: Unlikely, $P < 10^{-6}$
		E. Improbable **Frequency** Fleet of systems: Unlikely Individual System: Unlikely

Table E7T2 ESOH RISK LEVELS

	Probability of Occurrence (P)				
Severity Levels	**A**	**B**	**C**	**D**	**E**
I	**High**	**High**	**High**	**Serious**	**Medium**
II	**High**	**High**	**Serious**	**Medium**	**Medium**
III	**Serious**	**Serious**	**Medium**	**Medium**	**Medium**
IV	**Medium**	**Medium**	**Low**	**Low**	**Low**

PMs shall prepare a programmatic ESOH evaluation (PESHE) per reference (b), enclosure 7, and this instruction, enclosure (3). The PESHE includes ESOH risks, a strategy for integrating ESOH into the systems engineering process, identification of ESOH responsibilities, a method for tracking progress, and a schedule for NEPA compliance. Potential ESOH impacts shall be addressed in the systems engineering process. PMs shall summarize the PESHE in the Acquisition Strategy. The summary PESHE for ACAT I and II programs shall be provided electronically to Deputy ASN(RD&A)(Acquisition Management (ACQ)) and ASN(I&E) for information.

7.3.1 ESOH Compliance

PMs shall comply with ESOH statutory and regulatory requirements, including 32 CFR 775 (reference (w)). The impact of ESOH requirements on a program's life-cycle cost, schedule, and performance and the ESOH impact of a program's system on the user and the operating environment shall be identified to the MDA.

7.3.2 National Environmental Policy Act (NEPA) and E.O. 12114 Environmental Effects Abroad

Final approval authority for acquisition program-related NEPA and EO 12114 documents is shown in Tables E7T3 and E7T4. CNR shall provide final approval authority for S&T project-related NEPA environmental assessments (EAs) and EO 12114 overseas EAs. The PEO/SYSCOM Commander/DRPM or CNR, as applicable, shall provide final approval authority for assigned non-acquisition program-related NEPA EAs and EO 12114 overseas EAs. Approval of records of decisions (RODs) under NEPA is at the ASN-level and may not be delegated. The environmental documentation process tables for NEPA and EO 12114 in this paragraph shall be followed by all acquisition programs where a PESHE or other evaluation determines there is a need for NEPA or EO 12114 documentation.

Reference (x) provides DON policy for selecting sites in accordance with NEPA and EO 12114. See reference (b), enclosure 7, for implementation requirements for all DON programs.

Table E7T3 ENVIRONMENTAL DOCUMENTATION PROCESS--NEPA

DOCUMENT	PREPARED BY ACTION PROPONENT	REVIEW	ENDORSEMENT	APPROVAL/ SIGNATURE
Categorical Exclusion (CATEX)	PM, CNR, COTF/Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM OPNAV (N00N)[1] Host Installation CO[2] ASN(I&E), Info Copy		PM, CNR, COTF/Dir, MCOTEA, or designee, Sign
Environmental Assessment (EA)	PM, CNR, COTF/Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM OPNAV (N00N)[1] Host Installation CO[2] Counsel ASN(I&E), Info Copy	CNO/CMC[3]	PEO/SYSCOM COMMANDER/ DRPM, CNR, or COTF/Dir, MCOTEA, Approve[4]
Finding of No Significant Impact (FONSI)	PM, CNR, COTF/Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM OPNAV (N00N)[1] Host Installation CO[2] Counsel ASN(I&E), Info Copy	CNO/CMC[3]	PEO/SYSCOM COMMANDER/ DRPM, CNR, COTF/Dir, MCOTEA, Sign[4, 5]
Environmental Impact Statement (EIS) (NOI/DEIS/FEIS)	PM, CNR, COTF/Dir MCOTEA, or designee	PEO/SYSCOM/DRPM OPNAV (N00N)[1] Host Installation CO[2] Counsel	CNO/CMC ASN(I&E)	ASN(RD&A), Approve[4]
Record of Decision (ROD)	PM or CNO/CMC	PEO/SYSCOM/DRPM OPNAV (N00N)[1] Host Installation CO[2] Counsel	CNO/CMC ASN(I&E)	ASN(RD&A), Sign[4, 5]

(See footnotes for the NEPA table below the EO 12114 table on the next page.)

PM - Program Manager
PEO - Program Executive Officer
SYSCOM - Systems Command
DRPM - Direct Reporting Program Manager
CNR - Chief of Naval Research
COTF - Commander, Operational Test and Evaluation Force
Director, MCOTEA - Director, Marine Corps Operational Test and Evaluation
CO - Commanding Officer
NOI - Notice of Intent
DEIS - Draft Environmental Impact Statement
FEIS - Final Environmental Impact Statement

Table E7T4 ENVIRONMENTAL DOCUMENTATION PROCESS -- EXECUTIVE ORDER 12114, ENVIRONMENTAL EFFECTS ABROAD

DOCUMENT	PREPARED BY ACTION PROPONENT	REVIEW	ENDORSEMENT	APPROVAL/ SIGNATURE
E. O. 12114 Negative Decision (Citing an Overseas CATEX or exemption)	PM, CNR, COTF/Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM OPNAV (N00N)[1] Host Installation CO[2] Counsel ASN(I&E), Info Copy		PM, CNR, COTF/Dir, MCOTEA, or designee, Sign
Overseas Environmental Assessment[6]	PM, CNR, COTF/Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM OPNAV (N00N)[1] Host Installation CO[2] Counsel ASN (I&E), Info Copy	CNO/CMC[3]	PEO/SYSCOM COMMANDER/ DRPM, CNR, or COTF/Dir, MCOTEA, Approve[4]
Overseas EIS	PM, CNR, COTF/Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM OPNAV (N00N)[1] Host Installation CO[2] Counsel	CNO/CMC ASN(I&E)[7]	ASN(RD&A), Approve[4]
Environmental Review (ER)/ Environmental Study (ES)	PM, CNR, COTF/Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM OPNAV (N00N)[1] Host Installation CO[2] Counsel	CNO/CMC ASN(I&E)[7]	ASN(RD&A), Approve[4]
ER or ES Concluding No Significant Impact	PM, CNR, COTF/Dir, MCOTEA, or designee	PEO/SYSCOM/DRPM OPNAV (N00N)[1] Host Installation CO[2] Counsel ASN(I&E), Info Copy	CNO/CMC[3]	PEO/SYSCOM COMMANDER/ DRPM, CNR, COTF/Dir, MCOTEA, or designee Approve[4]

FOOTNOTES

1. Obtain concurrence from OPNAV (N00N) for acquisition programs involving nuclear propulsion matters.
2. The host installation CO (e.g., test facility CO) where the EA is occurring.
3. CNO/CMC may delegate endorsement when a PEO/SYSCOM/DRPM has a clear knowledge of the requirements as demonstrated by the preparation of acceptable EAs and FONSIs (or corresponding EO 12114 documents).
4. Approval/signature authority may only be redelegated when MDA has been redelegated below PEO/SYSCOM Commander/DRPM.
5. The PM is responsible for ensuring public notification of FONSIs and RODs via appropriate medium. Where publication in the *Federal Register* is required, CNO/CMC will publish FONSIs and RODs.
6. The last page of the Overseas EA includes either (1) a Negative Decision that no significant harm will occur to the global commons, or (2) a conclusion that significant harm may occur to the global commons and an Overseas EIS must be prepared.
7. ASN(I&E) will coordinate with Department of State on actions (either unilateral or multilateral) affecting a foreign nation.

7.3.3 Safety and Health

CNO shall establish ESOH Advisory Boards to support the Fleet and advise the PEOs and PMs in areas where the consequences of a mishap can be catastrophic, to ensure that risks are identified, and that actions are taken to either mitigate or to knowingly accept the risks. All ship installations for new or modified weapons or weapon systems shall be formally reviewed and safety approval received during the system development and demonstration phase. ESOH risks shall be identified and managed using a system safety process that is integrated into the systems engineering process in accordance with reference (t).

7.3.4 Hazardous Materials Management

PMs shall use proven hazardous materials management procedures and processes in reference (y) to develop and implement their hazardous material management program.

7.3.5 Pollution Prevention

PMs shall review their programs to ensure they are in compliance with relevant pollution control regulations, such as Marine Pollution Protocol, and they are capable of operating freely per international conventions and federal regulations.

7.3.6 Explosives Safety

All acquisition programs that include or support munitions, explosives, or energetics shall comply with DOD and DON explosives safety requirements including the requirements of reference (z). The DON Component Acquisition Executive (CAE) (ASN(RD&A)) shall accept all risks involving explosives safety for ships or systems under design or construction. The ASN(RD&A) shall consult with the SYSCOM technical authority managing the explosives safety program prior to accepting any explosive safety risks.

7.3.7 Aviation Critical Safety Items (CSIs)

References (aa) and (ab) establish requirements for the identification, cataloging, procurement, management, and disposal of aviation CSIs. PMs of aviation or ship-air integration systems shall ensure that aviation CSIs, are properly identified prior to provisioning. PMs shall ensure that technical documentation used for reprocurement of the CSIs identifies critical characteristics or inspection requirement and serialization or marking requirements, that maintenance plans properly reflect the CSIs, and that a listing of qualified manufacturing, repair, overhaul, or maintenance sources for the CSIs has been provided to the logistics management organization. PMs of aviation or ship-air integration programs shall ensure timely responses to requests to evaluate item criticality, assess

alternative CSI sources of supply, or evaluate changes to or variations from established CSI design, manufacturing, installation, overhaul, modification, or repair practices.

Chapter 8
Acquisition of Services

References: (a) Public Law 107-107, "National Defense Authorization Act for Fiscal Year 2002, Section 801, Management of procurement of services," 28 Dec 01 (NOTAL)
(b) USD(AT&L) memorandum, "Acquisition of Services," 31 May 02 (NOTAL)
(c) DoD Directive 5000.1, "The Defense Acquisition System," 12 May 03 (NOTAL)
(d) DoD Instruction 5000.2, "Operation of the Defense Acquisition System," 12 May 03 (NOTAL)

8.1 Introduction

Services should be acquired as strategically and efficiently as practicable. Reference (a), Section 801(d), required the Secretary of Defense to establish a management oversight process for the acquisition of services that is comparable to the process for the acquisition of hardware.

The Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) guidance per reference (b) clarifies that service acquisition is broader than contracting for services. It includes execution of one or multiple contracts, orders or other instruments for committing or obligating funds to acquire services that meet a specified requirement. The process described in the following paragraphs contains tiered approval levels based on the estimated total value of the service acquisition.

In addition, reference (a), Section 801(c), establishes specific acquisition management responsibilities for the decision authority.

8.2 Applicability

The acquisition of services process applies to services that are **not** included in, or managed and reviewed as part of, major and non-major defense acquisition programs and major and non-major information technology acquisition programs.

8.3 Definitions

"Decision Authority" - the official with services review and approval responsibility as defined in the table at the end of this enclosure.

"Service" - a requirement to perform an identifiable task, or tasks, rather than to furnish an end item of supply.

"Service Acquisition" - the execution of one or multiple contracts or other instruments for committing or obligating funds (e.g., funds transfer, placing orders under existing contracts, etc.) to acquire services that meet a specified requirement. Acquisition begins at the point when agency needs are established and includes all functions directly related to the process of fulfilling agency needs by contract, agreements, funds transfer, etc.

"Total planned dollar value" - the total value of an acquisition based on the value of the total planned requirement, including options, contingencies, fund transfers, provisioning, etc.

8.4 Responsibility

Oversight of service acquisitions within the Department of the Navy (DON) is the shared responsibility of requiring activities, contracting activities, and the Assistant Secretary of the Navy for Research, Development and Acquisition (ASN(RD&A)). The management and oversight process for acquisition of services is based on existing DON acquisition oversight structure with review and approval levels based on total planned dollar value.

Requiring activities, in conjunction with supporting contracting activities, shall prepare an acquisition strategy containing the information required by Attachment A to reference (b) for the decision authority's review. Acquisition Strategies shall be updated and submitted to the decision authority for review when significant changes occur. Contracting activities shall ensure the Federal socio-economic programs are given proper consideration.

8.5 Review and Approval Thresholds

USD(AT&L) will review and approve service acquisitions identified by USD(AT&L) as Special Interest, regardless of the purpose or planned dollar value. Acquisition Strategies for USD(AT&L) approval shall be submitted via ASN(RD&A).

The Assistant Secretary of Defense for Networks and Information Integration (ASD(NII)) will review and approve Information Technology (IT) service acquisition per the Major Automated Information Systems thresholds in references (c) and (d) and any IT service acquisition identified by ASD(NII) as special interest.

ASN(RD&A) will review service acquisitions designated as Special Interest by USD(AT&L) and ASD(NII) and will review and approve service acquisition with a total planned dollar value of $1 billion or more as well as service acquisitions identified by ASN(RD&A) as Special Interest. The Deputy Assistant Secretary for Acquisition Management (DASN(ACQ)) will review service

acquisitions requiring USD(AT&L) or ASN(RD&A) approval and will review and approve non-IT service acquisitions with a total planned dollar value between $500 million and $1 billion.

The Deputy Assistant Secretary of the Navy for Space and Command, Control, Communications, Computers, and Intelligence (DASN(Space & C4I)) will review IT service acquisitions requiring ASD(NII) approval and ASN(RD&A) IT Special Interest acquisitions. Acquisition Strategies with a total planned dollar value over $500 million or designated ASN(RD&A) Special Interest acquisitions shall be forwarded for ASN(RD&A) review via DASN(ACQ).

Program Executive Officers, Direct Reporting Program Managers and/or Heads of the Contracting Activity will review service acquisitions under their cognizance requiring USD(AT&L), ASN(RD&A) or DASN(ACQ) approval and will review and approve service acquisitions with total planned dollar value below $500 million.

For service acquisitions identified by activities outside of the acquisition commands, the Head of the DON Contracting Activity (HCA) normally providing contract support to the requiring activity will review and approve service acquisitions with a total planned dollar value below $500 million.

Approval authority for service acquisitions below $500 million is delegable, but, for acquisitions with a total planned dollar value over $100 million, limited to Flag or General Officers, members of the Senior Executive Service, or Commanding Officers.

Thresholds are summarized in Table E8T1 on the next page.

Table E8T1 Review and Approval Thresholds				
Service	**Total Planned Dollar Value**	**Requirements Review**	**Acquisition Strategy Review**	**Decision Authority**
Non-IT	USD(AT&L) Special Interest	Major Claimant	ASN(RD&A) DASN(ACQ)	USD(AT&L)
Non-IT	> $1 billion or ASN(RD&A) Special Interest	Major Claimant	DASN(ACQ) HCA	ASN(RD&A)
Non-IT	Between $500 million and $1 billion	Requiring Activity	HCA	DASN(ACQ)
Non-IT	< $500 million	Requiring Activity	TBD by Decision Authority	PEO, DRPM or HCA
IT	ASD(NII) Special Interest	DASN (Space & C4I)	ASN(RD&A)	ASD(NII)
IT	> $500 million or ASN(RD&A) Special Interest	DASN (Space & C4I)	DASN (Space & C4I) via DASN(ACQ)	ASD(NII) via ASN(RD&A)
IT	$32 million any one year or $126 to $500 million in all years or ASD(NII) Special Interest	DASN (Space & C4I)	DASN (Space & C4I)	ASD(NII)

8.6 <u>Review Procedures</u>

An acquisition strategy for service acquisitions meeting the review thresholds above shall be forwarded for review and approval prior to initiating any action to commit the Government to such strategy. Acquisition Strategies requiring USD(AT&L), ASN(RD&A), or DASN(ACQ) review and approval shall be submitted via DASN(ACQ). IT service acquisition for ASD(NII) approval will be submitted via DASN(Space & C4I).

For acquisition strategies requiring USD(AT&L) or ASD(NII) review and approval, within 10 working days of receipt of the acquisition strategy, USD(AT&L) or ASD(NII) will provide ASN(RD&A) a determination whether to conduct review of the acquisition strategy. If review is conducted, it will be completed within 30 working days of the determination. If the determination to conduct review is not made within 10 working days of receipt, the acquisition may proceed.

Program Executive Officers/Direct Reporting Program Managers/Heads of Contracting Activities shall establish review procedures commensurate with the review process above.

8.7 <u>Outcomes</u>

This review process shall ensure acquisition of services

within DON is strategic in nature, represents sound business practices and complies with applicable laws, regulations, directives, and other requirements.

8.8 Metrics

The preferred acquisition is performance based. The acquisition strategy should include cost, schedule, and performance metrics that measure service acquisition outcomes against requirements. Decision authorities will approve metrics for service acquisitions as part of their review and approval of the acquisition strategy. If metrics are not submitted with the acquisition strategy, the metrics must be submitted for decision authority approval prior to execution of any business instrument that initiates the acquisition. The timelines for USD(AT&L) or ASD(NII) metric review are identical to those for review of an acquisition strategy.

8.9 Data Collection

Acquisition strategies may be based on obligations and commitments under contract as well as obligations and commitments made outside of contract.

The DD350 system reports information required by Attachment B to reference (b) for DOD contract actions. The Federal Procurement Data System provides requisite report information for purchases accomplished by non-DOD contracting agencies to satisfy DOD requirements.

Requiring activities shall provide annual reports identifying Government contract actions under each acquisition strategy and addressing the report information required by Attachment B to reference (b) for parts of the acquisition strategy not accomplished through government contract. Reports shall be submitted in Excel (or similar electronic spreadsheet format) to DASN(ACQ) for non-IT services or DASN(Space & C4I) for IT services.

8.10 Execution Reviews

Program progress toward meeting approved metrics shall be continuously monitored within the requiring activity. Program progress reports shall be submitted to the decision authority annually unless the decision authority has identified an alternate reporting schedule. More frequent progress reports shall be submitted in cases where demonstrated program progress is unsatisfactory.

8.11 Decision Authority Acquisition Management Responsibilities

Use of a contract or task order above the simplified acquisition threshold that is not performance-based, regardless of whether the services are procured through a DON contract or

through a contract entered into by an official outside of DON, requires decision authority approval in advance of contract placement per the Navy-Marine Corps Acquisition Regulation Supplement Subpart 5237.1.

Use of contracts or task orders for the acquisition of services to be awarded by a department or agency outside DON requires approval from the decision authority. Decision authorities are responsible for maintaining records of service acquisitions forwarded for procurement outside DON. Such records should include, at a minimum, the type(s) of services required; estimated dollar value; the procuring activity; type of contract; contract number; and, total contract value.

Decision authority thresholds are listed in Table E8T2 below in terms of total planned dollar values.

Table E8T2 Decision Authority Thresholds

Total Planned Dollar Value	Decision Authority
≤ $50 million	HCA (or designee)
> $50 million < $500 million	DASN(ACQ)
≥ $500 million	ASN(RD&A)

Chapter 9
Program Management

References: (a) SECNAVINST 5400.15A, "DON Research, Development and Acquisition and Associated Life Cycle Management Responsibilities," 26 May 95 (NOTAL)
(b) DoD Directive 5000.1, "The Defense Acquisition System," 12 May 03 (NOTAL)
(c) SECNAVINST 5200.35D, "Department of the Navy Management Control Program," 10 Dec 97 (NOTAL)
(d) SECNAVINST 5710.25A, "International Agreements," 2 Feb 95 (NOTAL)
(e) DoD Instruction 5000.2, "Operation of the Defense Acquisition System," 12 May 03 (NOTAL)

9.1 Assignment of Program Executive Responsibilities

Program Executive Officers (PEOs), Systems Command (SYSCOM) Commanders, and Direct Reporting Program Managers (DRPMs) are accountable for the specific responsibilities listed in reference (a), including administration of assigned acquisition programs, and reporting directly to the Component Acquisition Executive (CAE) for such programs. PEOs, SYSCOM Commanders, DRPMs, and PMs have authority, responsibility, and accountability for life-cycle management of all acquisition programs within their cognizance. PEOs, SYSCOM Commanders, and DRPMs shall implement appropriate management controls as required by reference (b), and per reference (c), to ensure the policies contained in this instruction are implemented to the maximum extent practical. SYSCOM Commanders shall also provide support, as applicable, to PEOs, DRPMs, and PMs. PEOs, SYSCOM Commanders, and DRPMs are authorized to approve charters for assigned PMs. When an official exercises milestone decision authority (MDA) or direction on program matters, the decision or direction shall be documented with a copy forwarded to the Assistant Secretary of the Navy for Research, Development and Acquisition (ASN(RD&A)), the cognizant PEO, the PM, and the Chief of Naval Operations (CNO)/Commandant of the Marine Corps (CMC). The official shall be held responsible and accountable for the decision or programmatic direction.

9.2 International Cooperative Program Management

International cooperative programs require a legally binding agreement between the respective defense establishments of the United States and foreign governments. These agreements will be developed, negotiated, and staffed by the Office of ASN(RD&A) (DASN(IP)/Navy International Programs Office (IPO) with assistance and participation by cognizant PMs and/or PEOs.

Procedures for acquisition-related international agreements are contained in reference (d). PMs should coordinate

with DASN(IP)/Navy IPO for additional information on procedures and requirements.

9.3 Joint Program Management

When DON activities are considering involvement in another Service's program that is past program initiation, but pre-Full-Rate Production Decision Review (FRP DR), and there has been no formal previous involvement, DON activities shall establish an operating agreement with the lead Service defining participation in the program.

When a DON activity is considering involvement in another Service's program that is past FRP DR, and when there has been no previous formal involvement, the decision to forward funds to the lead Service will be supported by formal decision.

When ASN(RD&A) approves withdrawal from a program, CNO (N8)/CMC (Deputy Commandant, Combat Development (DC,CD)) will prepare the necessary briefing material and correspondence that supports ASN(RD&A)'s withdrawal decision. See reference (e), enclosure 9, paragraph E9.5, for implementation requirements for all DON ACAT programs.

Chapter 10
SECNAVINST, OPNAVINST, and Marine Corps Orders Cancellations

The following SECNAV issuances are canceled by this instruction:

SECNAVINSTs/NOTICEs/MEMORANDUMs

Issuance	Subject
SECNAVINST 5000.2B,	"Implementation of Mandatory Procedures for Major and Non-Major Defense Acquisition Programs and Major and Non-Major Information Technology Acquisition Programs," 6 Dec 96 (NOTAL)
ASN(RD&A) memorandum,	"Revision to Acquisition Program Baseline Format," 17 Mar 00 (NOTAL)
ASN(RD&A) memorandum,	"Navy Implementation of Department of Defense Policy on Specifications And Standards Reform," 21 Dec 94 (NOTAL)
ASN(RD&A) memorandum,	"Implementation of Department of Defense Policy on Specifications and Standards," 27 Jul 94 (NOTAL)
DASN(ACQ) memorandum,	"Acquisition of Services," 10 Mar 03 (NOTAL)
DASN(ACQ) memorandum,	"Promulgation of DoD 5000 Directive and Instruction," 9 Jun 03 (NOTAL)